ADDENDUM NO. 6 Appoquinimink School District Everett Meredith Middle School Bid Package 'A' Page 1 27 April 2020

The bid due date has been extended.

Bids will be received until 2:00 p.m. on Friday, 1 May 2020.

The location for receipt of bids is the Appoquinimink School District, Marion Proffitt Training
Center, 118 South Sixth Street, Odessa, Delaware 19730

In accordance with the active Public Health State of Emergency related to the novel coronavirus ("COVID-19"), and Social Distancing recommendations of the Delaware Department of Health and Social Services, the Appoquinimink School District will be proceeding with the following logistics plan for managing bid receipts and the subsequent public bid opening:

- 1) Physical copies of bids will be received at the Appoquinimink School District, Marion Proffitt Training Center, 118 South Sixth Street, Odessa, Delaware 19730. Bids may be hand delivered or mailed/shipped. Electronic bids will not be accepted. Bidder assumes full responsibility for timely delivery at location designated for receipt of bids. Any bids received after the stated time will be returned unopened.
- 2) School district personnel will be available to receive the bids on Friday, 1 May 2020, from 8am until 2pm local time. Signs will be posted at the main entrance directing bidders to the appropriate drop off location.
- 3) A public bid opening will be held immediately following the 2pm submission deadline, in the Board Room of the Marion Proffitt Training Center. Although the Appoquinimink School District is not prohibiting public presence at the bid opening, for the safety of the general public the State of Delaware guidelines for social distancing and public gatherings will be enforced. In an effort to reinforce recommended social distancing, the Appoquinimink School District strongly encourages attendees attend the bid opening via YouTube live stream at the following link:
  - a. Full link:

https://www.youtube.com/channel/UC7nnAUtcNQgymmVQCCNiaSg/videos?view\_as=public

b. Abbreviated Link:

bit.ly/appoyoutube

c. Alternative Conference Call Line:

Number: +1 (646) 558 8656 Access Code: 333 990 692

d. A recording of the bid opening will remain available for future access at the link above.



Note: Bid Documents obtained through the State of Delaware Government Support Services Website (bids.delaware.gov), are not for bidding purposes. Bid Documents may be viewed and downloaded at EDIS' FTP site. To obtain access to the FTP site, please submit your request via email to Jackie McKee at jmckee@ediscompany.com.

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

Whenever this Addendum modifies a portion of the Project Manual added information is shown as **Bold** and deleted information is shown as strikethrough.

The contract documents for the above referenced project, dated February 21, 2020 are amended as follows:

#### **GENERAL CLARIFICATIONS:**

1. None to report.

#### **QUESTIONS AND ANSWERS:**

1. See attached responses to RFI's – 18, 45, 47, 49, 57, 59, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 77, 78, 79, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110.

# **MODIFICATIONS TO SPECIFICATIONS:**

- 1. <u>SECTION 011100 SUMMARY OF WORK</u>; make the following pen and ink changes:
  - a. CONTRACT A-02 SITEWORK
    - 1. DELETE the work "decorative" from the first sentence of scope item no. 4. The lighted bollards shown on the site plans are to be provided by Contract A-30 Electrical.
    - 2. DELETE scope item no. 6. The roof drains are internal to the building and connect to the storm pipes shown on the Civil plans. There are no external downspouts that connect to a roof drain system.
    - 3. DELETE scope item no. 31. The DelDOT permit will be obtained by the owner.
    - 4. DELETE scope item no. 41. There are no foundation drains.
    - 5. DELETE scope item no. 49. The Sitework Contractor is to provide temporary source of water for other trades to utilize as described in A-02 scope item 24.
    - 6. DELETE scope item no. 53. There is no sod in the project.



#### b. CONTRACT A-03 CONCRETE

- 1. DELETE scope item no. 2. There are no foundation drains.
- 2. DELETE scope item no. 21 and REPLACE with the following:
  - "21. Install sleeves in concrete walls furnished by the contractor providing the utility."

#### c. CONTRACT A-04 MASONRY

- 1. ADD the following sentence to the end of scope item no. 5:
  - "Provide intumescent coating on top of the spray insulation as detailed on various wall types."
- 2. ADD the following new scope item after scope item no. 41 on page 011100-25:
  - "42. Install sleeves in masonry walls furnished by the contractor providing the utility.
  - "43. Provide data and submittal information related to the Scope of this Contract signed and sealed by a Professional Engineer as required by the Contract Documents."

### d. CONTRACT A-05 STRUCTURAL STEEL & MISC METALS

- 1. ADD the following new scope item after scope item no. 43 on page 011100-34:
  - "44. Provide steel channel, angle clip, and angle lintel where shown on the wall sections and detailed in Detail A/S-514."

#### e. CONTRACT A-06 CARPENTRY & GENERAL WORKS

1. ADD the following to the end of scope item no. 39:

"Provide corner guards. The solid surface wall protection is by Contract A-12 Casework and Millwork."

- 2. ADD the following new scope item after scope item no. 63 on page 011100-41:
  - "64. Prepare and Install salvaged wood flooring for construction of platform as seen in Details E1 and E2 on Sheet A-446. Wood flooring is to be salvaged by Contract A-01: Demolition and turned over to this contract."

#### f. CONTRACT A-07 METAL STUDS & DRYWALL

1. DELETE scope item no. 47 that appears after scope item no. 21. There are no PVC panels in the project.

### g. CONTRACT A-08 ROOFING & WATERPROOFING

- 1. DELETE scope item no. 9 and REPLACE with the following:
  - "9. Provide metal copings, fascias, and caps. Copings at top of metal wall panels to be provided by Contract A-09: Metal Wall Panels."
- 2. DELETE scope item no. 12. There are no existing roofs that require patching in this project.
- 3. DELETE scope item no. 19. There are no existing roofs that require patching in this project.
- 4. ADD the following new scope item after scope item no. 32 on page 011100-40:
  - "33. Provide dewatering of work areas.

## h. CONTRACT A-09 METAL WALL PANELS

- 1. ADD the following new scope item after scope item no. 18 on page 011100-50:
  - "19. Provide copings at top of metal wall panels."

#### i. CONTRACT A-11 GLASS AND GLAZING

- 1. DELETE scope item no. 3. There are no automatic operators in this project.
- 2. DELETE scope item no. 6 and REPLACE with the following:
  - "6. Provide frosted glass in the gymnasium."

#### CONTRACT A-12 CASEWORK AND MILLWORK

- 1. ADD the following new scope items after scope item no. 18 on page 011100-57:
  - "19. Provide solid surface wall protection where shown on the casework elevations."
  - "20. Provide stain grade wood trim nosing, fascia, and base along with p-lam façade at stage front."

#### k. CONTRACT A-15 CARPET & VCT

- 1. DELETE scope item no. 3 and REPLACE with the following:
  - "3. Provide vinyl composition tile, luxury vinyl tile, quartz tile, rubber tile, textile composite tile."
- 2. ADD the following to the end of scope item no. 10:
  - "Provide Rubber Nosings."
- I. CONTRACT A-16 CERAMIC TILE



- 1. DELETE scope item No. 2.
- 2. ADD the following to the end of scope item no. 15:

"The cost of this work will be taken out of the contract allowance."

#### m. CONTRACT A-17 TERRAZZO TILE

1. ADD the following to the end of scope item no. 5:

"The cost of this work will be taken out of the contract allowance."

### n. CONTRACT NO. A-19 WOOD & ATHLETIC FLOORING

- 1. DELETE scope item no. 3. Ventilation fan is not required by specification or manufacturers' requirements.
- 2. DELETE the following from scope item no. 4:

"studio theater, and Practice Rooms."

#### o. CONTRACT A-20 GYMNASIUM EQUIPMENT AND BLEACHERS

- 1. ADD the following new scope item after scope item no. 18 on page 011100-65.
  - "19. Provide floor cover and transport/storage system.
  - "20. Provide data and submittal information related to the Scope of this Contract signed and sealed by a Professional Engineer as required by the Contract Documents."

## p. CONTRACT A-21 THEATRICAL AUDIO/VISUAL EQUIPMENT

1. DELETE scope item no. 2. The projection screen will be provided by Contract A-06 Carpentry & General Work.

## q. CONTRACT A-27 PLUMBING

1. DELETE scope item no. 15. There is no emergency generator, therefore gas piping is not required.

### r. CONTRACT A-30 ELECTRICAL

1. ADD the following specification to the list of Technical Specification:

"Section 260130 Manholes

Section 260156 Adjustable Frequency Drives

Section 260430 Metering Equipment

Section 260444 Pad-Mounted Primary Load Interrupter

Section 260475 Elevator Electrical Systems

Section 260601 Lightning Protection Systems (Alternate No. 6)

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Section 260660 Surge Protective Devices (Intergral & External)
Section 260961 Performance Lighting Systems
Section 269063 Performance Lighting Systems Installation
Section 262861 Company Switches
Section 266010 Rigging Systems Electrical Work"

- 2. DELETE Section 260930 Dimming Controls from the list of Technical Specifications.
- 3. CHANGE Specification Section number "116623" to "116625".
- 4. In the 2<sup>nd</sup> sentence of scope item no. 31, change the contract reference from "C-21" to "A-30 Electrical".

#### s. CONTRACT A-31 STRUCTURED CABLE

- 1. DELETE specification section 260772 from the list of Technical Specifications.
- 2. ADD the following specification to the list of Technical Specification:

"Section 260773 Classroom Audio, Safety & Intercommunication System"

- 3. CHANGE the drawing number in scope items no. 1 and no. 2 from "E30.1" to "E-501"
- 4. DELETE paragraph b. from scope item no. 2. There is no Cafetorium Sound System.

### 2. SECTION 074213 - METAL WALL PANELS

- a. Page 074213-4, Article 2.02, Paragraph A:
  - Change to read:
    - 4. Metalwerks Econowall Wall Panels: www.metalwerksusa.com.
- b. Page 074213-4, Article 2.02, Paragraph A:

Change to read:

- A. Aluminum Sheet: Smooth surface coil-coated sheet, ASTM B209, 3105-H14 Alloy.
  - 1. Aluminum Material: Tension-leveled, flouropolymer PVDF painted finish, 3105-H14.
  - 2. Thickness: 0.060" nominal, minimum
  - 3. Surface: Smooth

#### 3. SECTION 084123 – FIRE-RATED ALUMINUM-FRAMED STOREFRONTS

- a. Page 084123-3, Article 2.01, Paragraph B:
  - Add subparagraph 1:
    - 1. Subject to compliance with requirements, the following manufacturers/Products are also proved:
      - a. Safti-First, a division of O'Keeffe's Inc: GPX Architectural Series; www.safti.com

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b. Page 084123-3, Article 2.02, Paragraph A, subparagraph 1a:

Change to read:

a. Face width: 2" or 2-1/2"

## 4. SECTION 087100 - DOOR HARDWARE

a. Page 087100-13, Article 3.08, HARDWARE SETS:

Add 1 Surface Closer and 1 Kickplate for the following doors: 117, 119, 139, 140, 141, 142, 144, 217, 219, 239, 241.

### 5. <u>SECTION 093000 – TILING</u>

a. Page 093000-3, Article 2.01, Paragraph E:

Add subparagraph 6:

- 6. Other approved manufacturers for PWT-1:
  - a. Dal-Tile Corporation; Society Colorbody Porcelain.

#### 6. SECTION 096633 – CEMENT TERRAZZO TILES

a. Page 096633-2, Article 2.03, Paragraph E, subparagraph 1:

Change to read:

1. Factory polished.

### 7. <u>SECTION 098400 – ACOUSTIC ROOM COMPONENTS</u>

a. Page 098400-5, Article 2.05, Paragraph C:

Add Paragraph C:

- C. Speaker Cloth:
  - $1. \quad A constically \ transparent \ speaker \ cloth: \quad A constone \ grille \ cloth, \ Designer/Architect \ Line \ ; \\ \underline{www.acoustonegrillecloth.com} \ .$
  - 2. Location: Speaker enclosures in Auditorium.

## 8. <u>SECTION 102600 – WALL PROTECTION</u>

a. Page 102600-3, Article 2.03, Paragraph F:

Add Paragraph F:

- F. FRP Wall Panels
  - 1. Manufacturer and Product:
    - a. Marlite; Standard FRP; www.marlite.com
    - b. Substitutions: See Section 016000.
  - 2. Material: Fiberglass reinforced thermosetting polyester resin panel sheets complying with ASTM D 5319.
    - a. Coating: Multi-layer print, primer and finish coats or applied over-layer.
    - b. Thickness 0.090 " (2.29mm) nominal
    - c. Width 4'-0" (1.22m) nominal
    - d. Fire Rating: Class A (I)
  - 3. Surface texture: Pebbled.

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- 4. Moldings and trim: Aluminum, clear anodized.
- 5. Location: Custodial Closets as scheduled.

## 9. SECTION 116625 – GYMNASIUM EQUIPMENT

- a. Page 116625-5, Article 2.06, Paragraph B, subparagraph 2a: Change to read:
  - a. Product: Model #AS-5000 as manufactured by Daktronics.

## 10. <u>SECTION 126613 – TELESCOPING BLEACHERS</u>

- a. Page 126613-3, Article 2.03, Paragraph A: Delete subparagraph 2.
- b. Page 126613-3, Article 2.03, Paragraph B, subparagraph 1c: Change to read:
  - c. Plywood Thickness: 5/8 inch, minimum.
- c. Page 126613-3, Article 2.03, Paragraph B, subparagraph 4: Change to read:
  - 4. Nosings: Extruded aluminum, clear anodized finish, or galvanized steel.

#### 11. SECTION 274117 – SOUND, VIDEO, & COMMUNICATION SYSTEMS

a. Delete Section 274117, and replace with Section 274117, Revision 2, dated 4/27/2020, attached to this Addendum.

#### **MODIFICATIONS TO DRAWINGS:**

## **DRAWINGS – VOLUME 1:**

- 1. DRAWING G-002: ADD Drawing C-230 Site Fire Marshal Plan, to the Civil Drawing List.
- 2. <u>DRAWING C-230</u>: Add Drawing C-230, attached to this Addendum.
- 3. <u>DRAWING A-451</u>: Delete Drawing A-451, and replace with Drawing A-451, Revision 1, dated 04/27/2020, attached to this Addendum.
- 4. <u>DRAWING A-513</u>: Delete Drawing A-513, and replace with Drawing A-513, Revision 1, dated 04/27/2020, attached to this Addendum.
- 5. <u>DRAWING A-601</u>: Delete Drawing A-601, and replace with Drawing A-601, Revision 2, dated 04/27/2020, attached to this Addendum.
- 6. <u>DRAWING A-613</u>: Delete Drawing A-613, and replace with Drawing A-613, Revision 1, dated 04/27/2020, attached to this Addendum.

#### **DRAWINGS – VOLUME 2:**

- 1. <u>DRAWING E-114</u>: Delete Drawing E-114, and replace with Drawing E-114, Revision 1, dated 04/27/2020, attached to this Addendum:
  - a. ADD emergency lighting in Boys Locker 148I.
- 2. <u>DRAWING E-115</u>: Delete Drawing E-115, and replace with Drawing E-115, Revision 1, dated 04/27/2020, attached to this Addendum:

- a. ADD emergency lighting in Band 158.
- 3. <u>DRAWING E-121</u>: Delete Drawing E-121, and replace with Drawing E-121, Revision 1, dated 04/27/2020, attached to this Addendum:
  - a. ADD exit signs in Media center 201.
- 4. <u>DRAWING E-131</u>: Delete Drawing E-131, and replace with Drawing E-131, Revision 2, dated 04/27/2020, attached to this Addendum:
  - a. REMOVE floor boxes.
  - b. ADD double duplex receptacles and data.
- 5. <u>DRAWING E-132</u>: Delete Drawing E-132, and replace with Drawing E-132, Revision 1, dated 04/27/2020, attached to this Addendum:
  - a. REMOVE floor boxes.
  - b. ADD double duplex receptacles and data.
  - c. ADD note for exterior camera data.
- 6. <u>DRAWING E-135</u>: Drawing E-135, at Stage area: ADD (4) 120v circuits to the smoke hatches at roof of stage. Provide (4) switches back stage center for control. Terminate at panel RP-1 on (4) 20A-1/P C.B.'S via 2#10 +#12 gnd in a 3/4" conduit each.
- 7. <u>DRAWING E-141</u>: Delete Drawing E-141, and replace with Drawing E-141, Revision 1, dated 04/27/2020, attached to this Addendum:
  - a. REMOVE floor boxes.
  - b. ADD double duplex receptacles and data.
- 8. <u>DRAWING E-142</u>: Delete Drawing E-142, and replace with Drawing E-142, Revision 1, dated 04/27/2020, attached to this Addendum:
  - a. REMOVE floor boxes.
  - b. ADD double duplex receptacles and data.
- 9. <u>DRAWING E-502</u>: Delete Drawing E-502, and replace with Drawing E-502, Revision 2, dated 04/27/2020, attached to this Addendum:
  - a. REVISE panels name.
- 10. <u>DRAWING ME-171</u>: Delete Drawing ME-171, and replace with Drawing ME-171, Revision 1, dated 04/27/2020, attached to this Addendum:
  - a. ADD note.

## **LIST OF ATTACHMENTS:**

#### **GENERAL INFORMATION**

#### RFI'S

RFI's – 18, 45, 47, 49, 57, 59, 66, 67, 68, 69, 70, 71, 73, 74, 75, 76, 77, 78, 79, 81. 82. 83. 84. 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110.

### **SPECIFICATIONS:**

SECTION 274117 - SOUND, VIDEO, & COMMUNICATION SYSTEMS

### **DRAWINGS – VOLUME 1:**



#### C-230 - SITE FIRE MARSHAL PLAN

- A-451 EXTERIOR ENTRANCES
- A-513 EXTERIOR SECTION DETAILS
- A-601 DOOR SCHEDULE
- A-631 INTERIOR DETAILS

#### **DRAWINGS - VOLUME 2:**

- E-114 FIRST FLOOR LIGHTING PLAN AREA 'D'
- E-115 FIRST FLOOR LIGHTING PLAN AREA 'E'
- E-121 SECOND FLOOR LIGHTING PLAN AREA 'A'
- E-131 FIRST FLOOR POWER PLAN AREA 'A'
- E-132 FIRST FLOOR POWER PLAN AREA 'B'
- E-141 SECOND FLOOR POWER PLAN AREA 'A'
- E-142 SECOND FLOOR POWER PLAN AREA 'B'
- E-502 DETAILS ELECTRICAL

ME-171 - SITE PLAN MECHANICAL & ELECTRICAL

End of Addendum No. 6



TO: SETH HAMMONDS, ABHA		PRE-BID RFI#: 018
FROM: ANDREW HICKEY, EDIS COMPANY	_	DATE: 27 MARCH 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	_	
DWG. # / DETAIL:SPEC. SECTIONS:		PAGE:
REQUEST:		
Submitted By: EDiS Company	Date:	27 March 2020

- 1.) S-004 There are 4 different schedules for lintels, either concrete or steel, on this sheet. One of the schedule has tags L-1 to L-4 that correspond to marks on the plans. Can you clarify where the other types of lintels are to be used throughout the project. It makes a difference on how the Masonry and Steel contractors price the work.
- 2.) S-101 can you provide dimensions on the larger scale plans S-111 to S-115? The overall plans are too small to read.
- 3.) The open triangle symbol on line intersection of A.I and B.2 is not shown in the drawing symbols on S-001. This symbol is repeated throughout sheets S-102 and S-103.
- 4.) S-111 shows a stepped footer between column lines A5 & A6 on AB. There are no underground pipes shown on the MEP drawings at this location. Is a step footer required?
- 5.) S-111 shows a stepped footer between column lines A1 & A2 on AB. The invert of the 6" pipe at this location is 51.50' as shown on P-101. The top of footer adjacent to the step is 54.83'. This requires a 3.33' drop in a very short distance. The stepped footer detail on S-501 has a maximum step height of 1'-4". Provide clarification on how to install the step at this location.
- 6.) S-111 Why are there 2 stepped footings at east side of the stairs on line A.G near line A.5?
- 7.) S-114 What is the elevation of the S-4 slab in the Gym? Is this to be depressed 2-1/8" like the adjacent S-1 slab?
- 8.) S-114 Note 7 states "TSF" indicates thickened slab footing. See Section indicated for additional information. There don't appear to be any sections indicated on the TSF's in the locker room area. Provide sections and clarify requirements.



- 9.) S-115 There are turned down slabs between E.L & E.N and E.2 & E.3. There is also sidewalk at these locations shown on the civil drawings. Provide clarification on which drawings are to be followed Civil or Structural.
- 10.)S-115 shows the slab at the stage at elevation -0.25′. The slabs adjacent to the stage are at elevation 0.0′. Provide clarification where the step between 0.0 and -0.25′ is to occur.
- 11.)S-115 Detail mark 7/S-504 around the columns on either side of the proscenium on column line E.12 shows CMU around the columns. Detail 7 on S-504 shows a tube column with plates attached back to the H columns. However this detail doesn't show the CMU and how it interfaces with the columns. Can you update detail 7 to include the CMU?
- 12.)S-121 The section mark through the window between lines A.J and A.I on the wall on line A.14 is shown as 4/S-514. This section doesn't show the window. Should it be 3/S-514?
- 13.)S-121 There is a lintel between column lines A.3 & A.4 on line A.J. The lintel tag is covered by the beam tag W24x55. Please provide the lintel type at this location.
- 14.)S-122 There is a section mark 4/S-503 through the NBL on the east side of the stair tower. The section on S-503 is through the foundation and the NBL is not shown. Please provide a section through this location.
- 15.)S-131 At the south stair tower, there are 3 20K5 bar joists that intersect the east wall over top a L1 lintel. Confirm that bearing plates are required in the CMU wall above the lintel.
- 16.)S-131 There is a lintel shown in the north wall of the south stair tower on column line A.14. There is no opening in this wall on the architectural drawings. Please resolve discrepancy.
- 17.)S-131 Should the lintels crossing the corridor, at the entrance to the stair tower on column line A.14, be steel or concrete?
- 18.)S-132 At the north stair tower, there are 3 20K5 bar joists that intersect the east wall over top a L1 lintel. Confirm that bearing plates are required in the CMU wall above the lintel.
- 19.)S-132 Should the NBL lintels crossing the corridor, at the entrance to the stair tower on column line B.1, be steel or concrete?
- 20.)S-134 The roof drains on column line D.7 are in conflict with the steel. Coordination is required with the architectural and plumbing drawings. Provide a centerline distance from column line D.7 to the center of the drains.
- 21.)S-135 The roof drains on column line E.T at E.5 & E.18 are in conflict with the steel. Coordination is required with the architectural and plumbing drawings. Provide a centerline distance from column line E.T to the center of the drains.



- 22.)S-141 There appear to be column covers around the columns in the auditorium. Provide the wall type at these locations.
- 23.)S-201 Shows deck type D-5 over the "Learning Stairs". What is the material for the steps and risers to the left of the Learning Stairs?
- 24.)S-202 Section 4 What is the material that fills in between the HSS beams that are on the outside of the building at the entrance?
- 25.)S-202 Section 7 How is the tube steel lintel that supports the cast stone veneer connected to the floor beams that are above the tube steel and perpendicular?
- 26.)S-501 The typical concrete stair details show the risers being angled. What is the angle of the risers? Is nosing or tread inserts required? Is reinforcing along the tread noses required?
- 27.)S-501 There is a Typical Bollard Detail on this sheet. The Civil drawings only show decorative bollards. Are 8" steel bollards to be used on the project?
- 28.)S-505 Section 1, the detail calls out Ivany block. Can another manufacturer be used? Section 042000 calls out Standard Units.
- 29.)S-505 Section 1, what is the size and spacing of the vertical reinforcement?
- 30.)S-505 Detail 3 shows 1/2" pre-molded joint filler between the slab and the wall. The detail shows this joint filler recessed into the CMU wall. Confirm that the joint filler can be applied to the surface of the CMU wall without recessing.
- 31.)S-516 Some of the sections call for L4x4x5/16 angles at the roof deck and other sections call for 1/4" bent plate. Why are 2 different materials required?
- 32.)S-518 Section 7 has a note to "See Plan" for the T.O. Parapet elevation. The elevation is not shown on structural plans. Please provide elevation.
- 33.)S-519 Section 1 through the head of the proscenium shows 2 HSS Built-up beams. Provide clarification of how these beams are intended to be connected to the C6 columns on either side of the proscenium.
- 34.)S-520 Section 3 There should be a metal stud knee wall at the base of the metal panel wall similar to Section 1 on S524
- 35.)S-522 Section 1 shows the configuration of the framing at the Learning Stairs. This shows each landing overhanging the vertical riser that supports it by a few inches. This does not match the configuration shown in Section C1 on A406 for the Learning Stair Seats. Need to resolve conflict.
- 36.)S-523 The sections show the deck construction at the Control Booth to be concrete, while the note shows "T.O. Plywood". Provide clarification.
- 37.)S-524 Section 1 shows the metal stud knee wall at the base of the metal wall panel. Is this knee wall to be mounted to the face of the CMU or should it be mounted to the roof deck. We think it should be mounted to the roof deck.



- 38.)S-524 Section 1 the metal wall panel is shown to go past the knee wall and below the roof level. The metal wall panel should stop above the knee wall. This conditions existing on other sections.
- 39.)S-525 Section 6 There should be a metal stud knee wall at the base of the metal panel wall similar to Section 1 on S524
- 40.)S-525 Section 4 shows the metal stud knee wall at the base of the metal wall panel. Is this knee wall to be mounted to the face of the CMU or should it be mounted to the roof deck. We think it should be mounted to the roof deck.
- 41.)S-526 Section 5 shows a ¼" bent plate above the wide flange beam at the metal studs. Inside is a concrete symbol. Is this intentional or a graphic error?
- 42.)S-526 Section 2 shows the metal stud knee wall at the base of the metal wall panel. Is this knee wall to be mounted to the face of the CMU or should it be mounted to the roof deck. We think it should be mounted to the roof deck.

#### **RESPONSE:**

- 1.) 1. Concrete/ Steel Lintel Schedule (6" non-bearing walls) is used at all 6" CMU non-bearing walls for openings up to 10' wide. 2. Non-Bearing and Loose Lintel Schedule is used at all loose lintels for 4" brick veneer, 4", 8", and 12" non-bearing CMU block openings up to 8'-0" wide. 3. Steel lintel Schedule (8" CMU w/ 4" Brick, non-bearing walls) not required. Drawings will be updated accordingly. 4. Steel lintel Schedule is to be used where identified on Structural framing plans and sections. See Addendum #5 for revised lintel schedules on Sheet S-004
- 2.) All dimensions to be coordinated per architectural drawings.
- 3.) It is identified on S-001 "Structural Plan Notation" as moment connection symbol. The open triangle is a wind moment connection.
- 4.) No stepped footing shown in this location. Please verify that the latest "02/21/2020 ISSUED FOR BID" drawings are referenced.
- 5.) See Addendum #5 for revised stepped footing layout
- 6.) Portion of stair shaft wall footing is too close to the spread footings at -3' t.o. footing elevation. Wall footing needs to drop along those locations of influence.
- 7.) Yes, S4 slab is depressed 2-1/8" like the rest of the Gym.
- 8.) See Addendum #3 issue
- 9.) Provide 5' concrete pad with TDS entrances to the building (coord. w/ arch for locations), sidewalk beyond per civil drawings. See Addendum No. 3
- 10.) See Addendum #5 drawings



- 11.)See Addendum #3 issue for structural detail 7/S504. See Addendum #5 a-312 and A-427 for revised architectural details at proscenium opening.
- 12.) There is no window between A.J and A.I. The beam tag W12x48 is over top the wall symbol and makes it appear to be a window.
- 13.) See Partial Framing Plan on S-201 for the framing information.
- 14.) See Addendum #3 issue Incorrect section marker removed.
- 15.)Bearing plates are required beneath all bar joist seats. See Section 4 on S515. The lintel is required at the head of the window on the same wall. See the architectural drawings for the lintel's elevation.
- 16.)No Lintel is needed at this location. The background has been updated. See Addendum No. 3
- 17.) See question 18.1 above and Addendum #5 for revised lintel schedule
- 18.) Bearing plates are required beneath all bar joist seats. See Section 4 on S515. The lintel is required at the head of the window on the same wall. See the architectural drawings for the lintel's elevation.
- 19.) See question 18.1 above and Addendum #5 for revised lintel schedule
- 20.)Roof drains are typically 1'-6" centered away from the parapet face. Dimensions have been added to the roof plan for addendum #3. We do not see a structural/plumbing conflict.
- 21.)Roof drains are typically 1'-6" centered away from the parapet face. Dimensions have been added to the roof plan for addendum #3. We do not see a structural/plumbing conflict.
- 22.) These are furr-outs. See Addendum #3 for partition types on A-427
- 23.) Floor sheathing is 'D5' at the learning stair. Coordinate with architectural drawings for the actual finishes.
- 24.)'S1A' Concrete See Addendum #5 drawings
- 25.)HSS beam supports the floor beams (not the other way around) and are framed into the HSS columns. Provide a 1/4" weld on each side or provide (2) 3/4"Ø Hollo-Bolts from WF bottom flange to top of HSS. See Addendum No. 3
- 26.) Nosing must be 1" projection. Coordinate in field for angle requirement based on the actual riser height. Nosing or tread inserts are not required. Reinforcing requirements are shown on S501. Reinforcing is not required at the tread noses.
- 27.) No. Standard bollard is 6" per S-501 and Section 055000.
- 28.) No Ivany blocks must be used.
- 29.) See Addendum #5 Drawing S-505
- 30.) Drafting error joint is not recessed. Reflected in Addendum #3 issue
- 31.)L4x4 is used at joist bearing conditions, in other locations, typically parallel to the beam it is bent plate as the edge distance can vary.
- 32.) Coordinate with architectural drawing A-513



- 33.)See Addendum #3 issue
- 34.)See Addendum #3 issue
- 35.)See Addendum #3 issue
- 36.)Typo It is concrete on metal deck (S2). Reflected in Addendum #3 issue
- 37.)Drafting error see Addendum #3 issue
- 38.) Metal panel detailing to be coordinated with architectural drawings. Architectural model in Structural sections is for reference only.
- 39.)See Addendum #3 issue
- 40.) Drafting error see Addendum #3 issue
- 41.)Drafting error see Addendum #3 issue
- 42.) Drafting error see Addendum #3 issue

Response By:	Scott Lester, ABHA	Date: <u>22 April 2020</u>
1 3		<u> </u>



TO: EDIS COMPANY / A	BHA	PRE-BID RFI#: 045
FROM: ANDREW H	ICKEY, EDIS COMPANY	DATE: <u>14 APRIL 2020</u>
PROJECT: EVERETT MEREL	DITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: Nickle Ele	ctric	Date: 14 April 2020

- 1.) Theatrical A/V scope states that the EC is to provide all devices indicated on the drawing. Please confirm that the EC is only to provide electrical devices (i.e. receptacles, line voltage switches) and all other special system devices will be by others.
- 2.) Please provide updated single line drawing to show feeder requirements and what panel/switch board feeds originate from for panels KP-1, KP-2, KP-3 and MP-1.
- 3.) Please provide panel schedules and details for panels PB-101S, PB-102S, PB102IG and PB-201S.
- 4.) Please provide locations in the building where switchboard SDP and PB are to be installed.
- 5.) Will contact A-22 be responsible for furnishing and mounting all electric battens in the auditorium area?
- 6.) Electrical summary of work #31 states that contract C-21 is to provide all device boxes, underground conduit and conduit to above accessible ceilings with pull strings. Please confirms that is, not contract C-21.
- 7.) Please confirm the contract that is responsible for furnishing and installing the motorized line sets called for in Alternate #7 Orchestra Shell.

#### **RESPONSE:**

1.) Correct. Electrical Contract is to provide rough wiring and electrical devices (receptacles, line switches, etc). All A/V devices are to be provided by Contract A-21.



Electrical Contract is to provide all device boxes and conduits with pull strings for A/V control wiring and devices.

- 2.) See Addendum No 4.
- 3.) See Addendum No 4.
- 4.) See Addendum No 4.
- 5.) Electrical battens and associated cable cradle is to be provided by Contract A-22: Theatrical Rigging. Contract A-30: Electrical is to supply and install performance lighting outlet devices, hanger brackets, and multicable assemblies.
- 6.) Correct, reference to Contract C-21 was made in error. Delete reference to Contract C-21 and replace with Contract A-30.
- 7.) Acoustic shell motorized line sets are to be supplied and installed by Contract A-22: Theatrical Rigging. Electrical contractor is to coordinate and provide power to the motorized linesets.

Response By:	EDiS Company / ABHA	_Date:	23 April 2020
1 3	1 7		•



TO: EDIS COMPANY			PRE-BID RFI#:	047
FROM: ANDREW	V HICKEY, EDIS COMP	ANY_	DATE: <u>14 APR</u>	<u>IL 2020</u>
PROJECT: EVERETT ME	REDITH MIDDLE SCHO	OOL		
DWG. # / DETAIL:	SPEC. SECTIONS	5:	PAGE:	
REQUEST:				
Submitted By: Brandy	wine Contractors		Date: 14 April 2	020
1.) Looks like doub theatrical A/V ite	le coverage on the pro em 2.	ojection scree	ns. Carpentry iten	n 21 and
RESPONSE:				
	screens are to be prov 74117 was revised to d	•	-	ry and General
Response By:	EDiS Company	Date:	24 April 2020	



TO: EDIS COMPANY / ABHA	PRE-BID RFI#:049_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 15 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: TJ Distributers	Date: 15 April 2020

- 1.) Contract No. A-20 paragraph A.8 indicates that the contractor is to provide wrestling mats, storage, and accessories. Can you please confirm that the A-20 contractor is to provide these materials? If to be provided, please provide a specification included in section 116625.
- 2.) Contact No. A-20, paragraph 10 indicates that a group control system is to be provided; however, drawing E-134 indicates key-switch operation for the electric gymnasium equipment. Can you confirm if the group control system is to be provided and if so, can you please provide a specification?
- 3.) Contract No. A-20 paragraph 10 indicates that a ceiling suspended batting cage is to be provided; however, this batting cage is not specified in section 116625 nor is it mentioned in the drawings. Can you please confirm that the A-20 contractor is to provide and install a ceiling suspended batting cage and if so, can you please provide a specification?
- 4.) Contract No. A-20, paragraph 10 indicates a scorer's table is to be provided; however, no scorer's table is mentioned in section 116623 pr 126613 nor is it mentioned in the drawings. Can you please confirm that the A-20 contractor is to provide a scorer's table and if so, can you please provide a specification?
- 5.) Section 116625, paragraph 2.03 specifies a divider curtain but does not specify a safety lock for the drive system, this will prevent the curtain from free-fall in the stored position if a motor or gear box fails. Will a curtain lock be required for the divider curtain?
- 6.) Section 116625, paragraph 2.06.A.1. specifies a floor cover and transport system. Can you please confirm that the floor cover is to cover the gymnasium basketball court including the flooring area exposed when the bleacher is in its closed position?



- 7.) Section 116623, paragraph 2.06.B.1.a specifies team name and intelligent captions 100% electronic. Can you please confirm that the scoreboard team names are to be electric LED digits and not vinyl applied directly to the scoreboard?
- 8.) Section 116625, paragraph 2.06.B.2 description does not match the product specified in paragraph 2.06.B.2.a. This product is a scoreboard, not a control console. The Daktronics control console specified in paragraph 2.06.B.2 is the #AS-5000. Can you please revise the product specified in paragraph 2.06.B.2.a?
- 9.) Drawing 411, sheet note #2 indicates that the wall padding should wrap front and sides of furr-out but drawing A-114 does not show some of these columns having pads that wrap around the corners of the columns. Can you please confirm that the wall padding is to completely cover the furr-outs except for the (4) corners of the gymnasium and the (3) bleacher wall columns?
- 10.) Section 126113, paragraph 1.07.G has a requirement to include samples finishes with the bid. Can you confirm that this is not a requirement for bid submission?
- 11.)Contract No. A-23: Theater Seating, item #2 indicates that the contractor is to provide fixed, removable, and loose audience seating; however, no loose audience seating specification is provided. Is the loose audience seating apart of this scope, if so can a specification be provided for this seating?
- 12.) Drawing TS-1.10 shows eight seats at the sides without numbers. Can you please confirm that these chairs are the loose seats?
- 13.)Section 126613, paragraph 2.02.A.6 specifies the wheelchair spaces to have removable railings at row two behind wheelchair spaces but these are not required by building code and are cumbersome to set up and take down. We would recommend not requiring rails at the recoverable ADA spaces. Will removable rails be required for the ADA spaces?
- 14.) Section 126613, paragraph 2.02.C.2 specifies a row rise of 11-5/8-inch. This 11-5/8-inch row rise would create a 2-inch gap between rows when in the closed positions, which creates a ladder affect and can damage the bleachers support arms when in the stored position. Will it be acceptable to provide 9-5/8-inch (10-inch nominal) row rise to prevent these potential operational issues?
- 15.)Section 126613, paragraph 2.02.E.4 specifies limit switches which are typically used when the gymnasium floor is synthetic to prevent the bleacher motor wheels from spinning and ruining the floor; however, the gymnasium floor is to be wood wood floors do not require the limit switches. Can you please confirm that limits switches are to be provided?
- 16.)Section 126613, paragraph 2.03.A.2 specifies seats with back supports as shown. These back supports are not shown on the drawings and also not compatible with 22-inch row spacing. Can you please confirm that back supports for the bleacher seats are not to be provided?



- 17.)Section 126613, paragraph 2.03.B.1.c specifies plywood thickness of 3/4-inches. All of the specified manufacturer's standard plywood thickness is 5/8-inches. Will 5/8-inch plywood decking be acceptable?
- 18.) Section 126613, paragraph 2.03.B.4 specifies nosing to be extruded aluminum with a clear anodized finish; however, all of the specified bleacher manufacturer's standard nose is galvanized steel. Can you please confirm that the manufacturer's standard galvanized steel nosing is acceptable?

# **RESPONSE:**

- 1.) Wrestling mats and accessories are not required. This scope item will be deleted in Addendum No. 5
- 2.) Provide key-switch operation as shown and specified. There is not a group control system.
- 3.) Batting cages are not required. This scope item will be deleted in Addendum No. 5.
- 4.) Scorer's table is not required. This will be an FF&E item. This scope item will be deleted in Addendum No. 5.
- 5.) Provide a safety lock.
- 6.) Flooring cover to cover exposed area when bleachers are in closed position.
- 7.) Electronic captions as specified.
- 8.) #AS-5000 is the correct product number for the control console.
- 9.) Padding should wrap the front and sides of the furr-outs, except for the (4) corners of the gymnasium and the (3) bleacher wall columns
- 10.) Samples are not required with the bid.
- 11.)Loose seats will be specified as FF&E and are NIC.
- 12.) Correct, the 8 seats without numbers are loose seating.
- 13.)Provide removable rails as specified.
- 14.)Provide 11-5/8" row rise as specified.
- 15.)Limit switches to be provided as specified.
- 16.) Back supports are not required. Refer to Addendum #6.
- 17.)5/8" plywood is acceptable.

18.)Galvani	zed steel nosing is acceptable.			
Response By:	EDiS Company / ABHA	Date:	27 April 2020	



TO: <u>S</u>	ETH HAMMONDS, A	ABHA	PRE-BI	D RFI#:	057_
FROM:	ANDREW HIG	CKEY, EDIS COMPANY	<u>′</u> D.	ATE: <u>16 AP</u>	RIL 2020
PROJECT	: EVERETT MEREDI	TH MIDDLE SCHOOL	<u> </u>		
DWG. # /	DETAIL:	_SPEC. SECTIONS:		PAGE:	
REQUES	Γ:				
Submitted	l By: <u>Patriot Insu</u>	lation		Date: <u>1</u>	6 April 2020
2.) W P su th 3.) W ir	gid fiberglass board Jill the pipe insulat VC jacket? I unders urfaces getting pain ne paint better than Jill the 10" round ro	ion in the cafeteria roo stand the ceiling finish ited by others. The AS the PVC jacket. un out duct in the aud and the rectangular d	om 146 be constants "expo A" w  I finish on the p	idered exp hich is ope pipe coveri	osed and require en ceiling with all ing will "hold"
RESPON	SE:				
3.) T	es, PVC jacket can l he round runouts a	oe omitted in this areare to be internally line out Lester, ABHA	ed, no exterior i	insulation	-
_				_	



TO: EDIS COMPANY, ABHA	PRE-BID RFI#:059_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>17 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Nickle Electric	Date: 17 April 2020

- 1.) Please confirm that Type "U" fixtures in dress rooms 171 and 172 on drawing E-115 are (1) linear run along each wall.
- 2.) Please provide detail of theater seat light termination noted in general note #7 on drawing E-135.
- 3.) Please provide details and information on the type and number of cables and or wires needed for power and control of theater seat lighting shown on drawing E-135.
- 4.) Rehearsal station RS-1402 on drawing E-135 calls for (4) 20A circuits from PB-103S, but rehearsal station RS-1401 does not call for any circuits. Is RS-1401 to be fed from RS-1402 or should it have its own dedicated circuits? If it is to have its own dedicated circuits please provide number of circuits, amperages and conduit size.
- 5.) What is the EC required to provide for symbols RC-1 through RC-4 shown on schedule of drawing E-135?
- 6.) Please clarify fire alarm note on drawing E-155 as to what exactly the EC is to provide.
- 7.) Please provide missing sheet number for schedule note #1 on drawing E-181.
- 8.) Please provide details called out in schedule notes #5 and #6 on drawing E-181.
- 9.) Please provide locations and Electric Schedule details for items #45,46,47 and 48 called out in schedule note #6 on drawing E-181.
- 10.)Detail of communications duct bank "A" on drawing E-501 shows leveling blocks underneath the concrete encasement in the trench. Please confirm if leveling blocks will be required for this work.
- 11.)Detail for direct buried conduit on drawing E-501 shows using clean sand and select fill dirt for backfilling. Will reusing existing material be sufficient for backfilling?
- 12.) The notes at the bottom of the equipment schedule on drawing E-602 state that the EC is to furnish fire alarm duct detectors for installation by others and then be



- responsible for all final connections to unit and fire alarm control panel. Please confirm that these devices and their connections are to be done by the special systems contractor.
- 13.) Please provide AIC ratings for all branch panels on drawings E-603, E-604 and E-605.
- 14.)On drawing ME-171 it shows (2) 4' conduits for primary power running across the roadway and stopping just on the other side. Is the EC to dead end the conduits in this location to be finished at a later date by others? Should there be a certain amount of cable slack left at the end of this run for terminations by others?
- 15.)Details on drawing A-006 show requirements for airtight installation. Will the general trades be responsible for the installation of pads, caulk, grout, etc. in this work?
- 16.) "R" symbol in Science room #225 on drawing E-142 we assume to be a power cord reel based on circuit description in branch panel board. If these are power cord reels please provide manufacturer and model number along with specific mounting detail if required.
- 17.)In Science room #225 on drawing E-142 there appears to be box structures around the assumed cord reels. According to drawing A-152 sheet keynote #7 these are unistrut power systems w/ reels. What contract is responsible for furnishing and installing the unistrut supports and reels? Can a mounting detail be provided?

#### **RESPONSE:**

- 1.) Refer to A4/A-443 for configuration of lights in the dressing rooms.
- 2.) Means and methods. Coordinate with seating contractor
- 3.) 2#8+#10G
- 4.) RS-1401 only contains connections to low-voltage control wires, no line-voltage circuits.
- 5.) Conduits, pullstrings and back boxes.
- 6.) Conduits, pullstrings and back boxes.
- 7.) See Addendum No. 5
- 8.) See Addendum No. 5
- 9.) These are portable items powered from convenience duplex receptacles.
- 10.)Leveling blocks are not required.
- 11.)Provide sand and select fill as detailed.
- 12.)See Addendum No. 5
- 13.)See Addendum No. 5
- 14.) This work will be by the Town of Middletown. See Addendum No. 4 for clarifications in the scope of work.



- 15.)Electrical contractor is to provide sheet caulking or outlet box pads as shown and inwall insulation around conduits. Mechanical/Plumbing is to provide insulation at ducts and pipes as shown. All trades are to cut their insulation to wall face as shown. Drywall Contractor is to provide drywall surrounding outlet boxes and acoustic sealant where shown.
- 16.) Mounting detail for power reels is on E1/A-151.
- 17.)See detail E1 on architectural drawing A-151. E.C to furnish and install unistrut support and reels.

Response By:	EDiS Company, ABHA	Date:	27 April 2020	
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TO: EDIS COMPANY	PRE-BID RFI#: 066
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>17 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: North East Contractors	Date: <u>17 April 2020</u>
<ol> <li>SOW #13 – what spec section do the acoustic reflethis project?</li> <li>SOW #20 – the third sentence in the paragraph is furnish and install the fire insulation at the edge</li> <li>SOW #47 (appears after SOW #21) – I am not find also nothing in the spec book. Am I missing information</li> </ol>	stelling the bidder that they must of 2nd floor slabs, correct? ding PVC trim/panels on the job,
RESPONSE:	
<ol> <li>The acoustic reflector is the GWB Acoustic Reflection drawings A-145.</li> <li>Correct.</li> <li>Metal Stud &amp; Drywall Scope item 47 is to be deleted the project. See Addendum No. 6</li> </ol>	<b>C</b>
Response By: EDiS Company	Date: <u>26 April 2020</u>



TO: EDIS CO	MPANY	PRE-BID RFI#: 067
FROM: <u>A</u>	NDREW HICKEY, EDIS COMPANY	DATE: <u>20 APRIL 2020</u>
PROJECT: <u>EVER</u>	ETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAII	.:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Revbold Construction	Date: 20 April 2020

- 1.) Drawing C-110 has several domestic water services coming off the 8" main with 8" Tees and 8" valves. An 8" tee and valve seems excessive for a water service. Can we accomplish these connections with service saddles and corporation stops instead?
- 2.) How thick is the stone layer shown on drawing A-113 in the turf and stone area adjacent to the loading dock? What type of stone is to be used?
- 3.) Where on the architectural drawings does it show details of the 8' high by 8' wide double gates shown on drawing C-110 where the waterlines enter the building?
- 4.) Are there Fire Marshall plans that show the striping and signage called out in sitework SOW item 2?
- 5.) Is there a drawing depicting the layout of the roof drain system called out in sitework SOW item 6?
- 6.) Please elaborate on sitework SOW item 33. Who is responsible for installing new light pole bases?
- 7.) Please elaborate on sitework SOW item 41. The concrete contractor is to backfill the foundations. Why is this in SOW item 41?
- 8.) Sitework SOW items 24 and 49 are in conflict. Which is correct?
- 9.) Please clarify sitework item 47. Define maintenance of the access roads. What is the extent of sitework contractor responsibility?
- 10.) Sitework SOW item 50, does this include all landscaping onsite as well as the planting in the bioretention areas?
- 11.) Sitework SOW item 53, is there sod on this project and if so, where?
- 12.) Sitework SOW item 59, what is the required for as-builts of the SWM facilities? Are redline drawings acceptable?



#### RESPONSE:

- 1.) The sizes of the water services to the building (fire and domestic) must be installed with the tees and valves specified on the plans.
- 2.) The stone at the turf area between the buildings is to be 6-inches of GABC.
- 3.) E5/A-501, and Section 323120.
- 4.) See Sheet C-230 Site Fire Marshal Plan included in Addendum No. 6.
- 5.) The roof drains are internal to the building and connect to the storm pipes shown on the Civil plans. There are no external downspouts that connect to a roof drain system.
- 6.) Contract A-02 Sitework is responsible for removing and/or relocating any light poles shown on the Civil drawings. Contract A-30 Electrical is responsible for any new light poles shown on the Civil drawings or ME-171.
- 7.) Sitework Scope item 41 is to be deleted. See changes to scope of work included in this addendum.
- 8.) Sitework Scope Item 49 is to be deleted. Sitework contractor is to provide temporary source of water for other trades to utilize as described in Scope item 24.
- 9.) Sitework contractor is to maintain and compact access roads to permit all contractors continued access to the site. Repairs required due to excess wear due to extreme weather conditions will be reviewed on a case by case basis and costs covered by the sitework allowance. Sitework contractor is to maintain all access roads and crane pads including those listed in Scope items 25 and 26 along with the temporary entrance, SCE, and construction laydown area shown on the Sediment and Stormwater Control Plans.
- 10.)Yes. Contract A-02 Sitework is responsible for ALL landscaping onsite.
- 11.) There is no sod in this project. This scope item will be deleted.
- 12.)Contractor is to provide as-builts deemed acceptable by the governing agencies (New Castle County and DNREC). It is this contractor's responsibility to coordinate these requirements with those governing agencies.

Response By: _	EDiS Company	Date:	27 April 2020
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TO: EDIS CO	MPANY, ABHA	PRE-BID RFI#:068_
FROM: A	ANDREW HICKEY, EDIS COMPANY	DATE: 20 APRIL 2020
PROJECT: <u>EVER</u>	ETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAII	.:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Pottsgrove Glass	Date: 20 April 2020

- 1.) Spec 084123 only lists (1) acceptable manufacture (Technical Glass Products). Please verify that Safti-First GXP series is an acceptable equivalent for the fire rated windows SF-10 (Qty 6), SF-10F (Qty 5) and SF-19 (Qty 1). Safti-First is listed as an acceptable glass manufacture in 088000.
- 2.) Spec 085674 calls for an acoustic rated aluminum window to meet STC-35 for VP4, VP5 & VP6. Spec lists Mon-Ray, Peerless and Wausau as acceptable manufactures. Please verify EFCO can be an acceptable equivalent with their series 3500 sliding / 3900 fixed window to meet STC-35 per spec.
- 3.) A-11 Scope of Work item #3, please verify there are no automatic door systems. Any automatic operators are supplied by contract A-10.
- 4.) A-11 Scope of Work item #6, please verify there are no translucent wall assemblies. None are located, and no spec is provided.
- 5.) A-11 Scope of Work item #10, says to provide ALL glass and glazing at interior/exterior. Please verify 101101 display case glass is not included+E298 in this (supplied by A-06 Carpentry, scope item #20).
- 6.) A-11 Scope of Work item #24 says to provide BIM services as detailed in 013700 & the bid form lists a break-out cost for BIM. Spec 013700 cannot be located. Please verify if BIM services are required for contract A-11 Glass & Glazing.
- 7.) Please verify if EXTERIOR and/or INTERIOR caulking of Aluminum Storefront Windows at PERIMETERS to building structure is to be supplied by A-11 Glazing.
- 8.) Architectural pages A-601 & A-602 lists MANY wood/hm doors getting glazing type 6 (20-min fire rated). However MOST of these doors/frames showing glass type 6 does not list any fire ratings. Please verify that doors/frames scheduled to received glazing type 6, should receive glazing type 3 if there are no fire ratings scheduled.



9.) Architectural page A-602, all glass doors 201C & 201D call for glazing type 3 (1/4" clear tempered), but spec 084126 calls for 1/2" clear tempered. We will include the 1/2" glazing per spec 084126.

#### **RESPONSE:**

- 1.) A 2-1/2" frame face dimension is acceptable. Safti-First is an approved manufacturer, see Addendum #6.
- 2.) EFCO 3500/3900 is acceptable. Also acceptable are YKK YSW 400-T sliding window, and Kawneer 8400TL.
- 3.) There are no automatic operators on this project.
- 4.) Frosted glass is specified at the gymnasium. There are no translucent wall panels. This scope item will be revised
- 5.) The glass for the display cases specified in Section 101101 is part of the display case system. Contract A-06 Carpentry & General Work is responsible for the display
- 6.) The requirement for BIM was deleted in Addendum No.4
- 7.) Contract A-11 Glass and Glazing is responsible for caulking the interior and exterior of all windows and curtainwall systems furnishing under their contract.
- 8.) Type 6 glass is correct; 20-minute glass must be provided at openings in smoke partitions, which are indicated on the life safety plans G-111 and G-112.
- 9.) 1/2" glass is correct.

Response By:	EDiS Company / ABHA	Date:	27 April 2020	
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#:069		
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 20 APRIL 2020		
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	-		
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:		
REQUEST:			
Submitted By: RC Fabricators	Date: <u>20 April 2020</u>		
<ol> <li>A-05 SOW Item 10. Roof Screens, supports and grillage - Could we move the actual Screen/Grillage out to another trade. (Maybe in the general trades or specialty finish scopes?) Steel contractor would still own all structural steel support as shown on structural plans.</li> <li>A-05 SOW Item 11. Louvers and grilles - Could we move this entire scope item into another trade (Maybe mechanical trade or as applicable to each scope?)</li> </ol>			
RESPONSE:			
<ol> <li>There are no roof screens. This scope item will be deleted.</li> <li>There are no architectural louvers. The mechanical louvers are specified in Div. 23.         Contract A-05 scope item 11 will be deleted. See Addendum No 5.     </li> </ol>			
Response By: EDiS Company	Date: <u>24 April 2020</u>		



TO: EDIS CO	OMPANY / ABHA	PRE-BID RFI#:070
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>20 APRIL 2020</u>
PROJECT: EVE	RETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETA	IL:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Peninsula Acoustical	Date: <u>20 April 2020</u>
1.) Please j	provide missing tags for business #224.	
RESPONSE:		
1.) Wall ta	gs are provided on A-121.	
Response By:	ABHA	Date: <u>22 April 2020</u>



TO: EDIS COMPANY	/ ABHA	PRE-BID RFI#: 071	
FROM: ANDREW	HICKEY, EDIS COMPANY	DATE: <u>20 APRIL 2020</u>	
PROJECT: EVERETT MER	REDITH MIDDLE SCHOOL		
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: Conver	ntional Builders	Date: <u>20 April 2020</u>	
shown on drawing 2.) Can all areas that	ng I-115? Also this is not calle t require WPM material be gi	all fixed seating or just where it is d out on drawing I-001, please advise. ven aterial in the auditorium be given?	
RESPONSE:			
<ol> <li>Delete WPM-1 at fixed seating. See revised sheet I-115 included in Addendum #5.</li> <li>Refer to casework elevations for wall protection material in classrooms. Refer to Learning Stair elevations for extent of wall protection at Learning Stair.</li> <li>WPM material in auditorium has been deleted from the project. Reference revised sheet I-115 included in Addendum #5.</li> </ol>			
Response By:	ABHA	Date: <u>22 April 2020</u>	



TO: EDIS COMPANY / ABI	-IA	PRE-BID RFI#:	073
FROM: ANDREW HIC	KEY, EDIS COMPANY	DATE: 20 APRIL	2020
PROJECT: EVERETT MEREDIT	TH MIDDLE SCHOOL		
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: M. Cramer &	z Associates	Date: <u>20 A</u> J	oril 2020

- 1.) Contract A-21: Theatrical Audio/Visual Equipment: Network switch provide model number
- 2.) Contract A-21: Theatrical Audio/Visual Equipment: Projector provide make and model number
- 3.) Contract A-21: Theatrical Audio/Visual Equipment: Wireless transmitters provide quantity required, make and model number
- 4.) Contract A-21: Theatrical Audio/Visual Equipment: Assistive listening system receivers provide make, model numbers, quantity required and accessories required
- 5.) Contract A-21: Theatrical Audio/Visual Equipment: ClearCom belt packs provide make, model numbers, quantity required and accessories required
- 6.) Contract A-21: Theatrical Audio/Visual Equipment: Loose cables provide schedule of cable types, lengths, connectors, etc.
- 7.) Contract A-21: Theatrical Audio/Visual Equipment: Spec section 1.04.C.5 (page 4) calls for loudspeaker array rigging by Theatrical Equipment Contactor but this work is not indicated in Section 116133 Rigging Systems and Draperies. Which section is responsible for this work?
- 8.) Contract A-30: Electrical: Sections 260961, 269063, 262861 and 266010 are not listed in Summary of Work section of this contact. See page 011100-88. Are these four sections included in this bid package?

### **RESPONSE:**

1.) Provide HP 2530 series network switches for Group K #15 & 16. See Addendum #6.



- 2.) See 274117 Addendum #6 dated 4/27/2020.
- 3.) See 274117 Addendum #6 dated 4/27/2020.
- 4.) See 274117 Addendum #6 dated 4/27/2020.
- 5.) See 274117 Addendum #6 dated 4/27/2020.
- 6.) As Required. The site conditions (conduit paths, vertical chases, etc.) will determine required lengths of all bulk cable types. Pre-Made Cables As Required to complete interconnect as shown in the drawings.
- 7.) Provide rigging of loudspeaker assemblies in 274117. See Addendum #6.
- 8.) Specification Sections 260961, 269063, 262861 and 266010 are the responsibility of Contract A-30: Electrical. See changes to the summary of work included in this addendum.

Response By:	EDiS Company / ABHA	Date: <u>27 April 2020</u>
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TO: EDIS CC	OMPANY / ABHA	PRE-BID RFI#: 074	
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: 20 APRIL 202	0
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHOOL		
DWG. # / DETAI	IL:SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By:	Old World Tileworks	Date: 20 April 2020	

- 1.) Please reference spec section 093000. The manufacture for PWT-1 has informed us that their matching 3x24 Bullnose is only available in a polished finish, not unpolished like specified. They do however have a 3x12 matching Bullnose trim in an unpolished finish. Can you clarify whether you would like to use the 3x12 Unpolished Bullnose or the 3x24 Polished Bullnose? Please note that the field tile PWT-1 is unpolished.
- 2.) Please reference spec section 093000. Can you confirm that the only three approved thinset for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Pro-Lite Premium LHT Mortar
  - b. Custom Building Products MegaLite Crack Prevention Mortar
  - c. Mapei Ultraflex 3
- 3.) Please reference spec section 093000. Can you confirm that the only two approved grouts for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Prism Color Consistent Grout
  - b. Mapei Ultracolor Plus FA (Mapei Ultracolor Plus has been replaced with Ultracolor FA)
- 4.) Please see the attached drawing. Is this highlighted lobby area Terrazzo or Rubber? Finish plan and finish schedule are contradictory.
- 5.) Please see the attached drawing. Is this highlighted landing area Terrazzo or VCT for Alternate 1? It appears to be VCT on the base bid, but the finish schedule and the finish plan are contradictory and the alternate is not mentioned.
- 6.) Due to the size and complexity of the ceramic tile and terrazzo package can there be the following requirements added to Contact 16 and 17 Scope of Work section, Specification section 093000 under section 1.07 C. Installer Qualifications, and any other pertinent areas of the project documents that all eligible bidders must meet the



following requirements at the time of the bid: A.) The use of in-house employees for installation labor is mandatory, subcontracting any portion of the labor is strictly prohibited. B) Eligible bidder's employees must be comprised of Ceramic Tile Education Foundation Certified Tile Installers. C.) Eligible bidders must have a Department of Labor approved craft training or apprenticeship program. These stipulations will ensure the State of Delaware and Appoquainamink School District get the quality, craftsmanship and necessary man-power needed to properly perform this project. All of these stipulations are part of the State of De Procurement Code and should be specified and enforced.

- 1.) Provide the 3x12 Bullnose trim in the unpolished finish.
- 2.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.
- 3.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.
- 4.) See updated finish schedule on I-601 included in Addendum #5 clarifying TRF-1 to be installed in lobby area of Stair 199A.
- 5.) See updated finish schedule on I-601 included in Addendum #5 clarifying VCT-1 to be installed in lobby area of Stair 299A.TRF-1 to be installed for Alternate 1.
- 6.) No. The Instruction to Bidders notifies all bidders that they are required to follow the current Title 29 bid laws. We will not duplicate these DE Code in the bid documents. The DE bid laws are being enforced.

Response By:	EDiS Company / ABHA	Date:	22 April 2020	
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TO: EDIS COMPANY / AI	ВНА	PRE-BID RFI#:075
FROM: ANDREW HI	CKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MERED	OITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: Cavan Cor	nstruction	Date: 21 April 2020

- 1.) The learning Stairs, on A-406 B1 & A1 is showing terrazzo stairs. In the concrete scope you have listed the 3/4 & 7/16" cement board to be installed by the concrete sub? The system requirement should be part of the terrazzo installation. I can already see the finger pointing. #10 in scope
- 2.) #21 supply all sleeves for all in coming utilities! and install, Installing is not a problem thru a concrete wall or under the footing. This should be furnished to the concrete sub. (Sleeves)
- 3.) Caulking of joints? Again this is done by someone else.
- 4.) Perimeter foundation drains are in the Concrete scope of work. Where are they shown on the drawings?
- 5.) Dewatering during the mason's and waterproofing. Once the footing is installed the mason should take over.
- 6.) Bim for our work only? or the complete job?

- 1.) Scope item no. 10 was deleted from Contract A-03 Concrete in Addendum No. 4
- 2.) The sleeves will be furnished by the contractor providing the utility. This scope item will be revised.
- 3.) Each contractor is responsible for caulk or sealant associated with their own work. If there is caulk or sealant shown in concrete, either on the structural or architectural drawings, then Contract A-03 Concrete is responsible for this work and should be included in your bid.
- 4.) This scope item is being deleted in Addendum No. 6



- 5.) The responsibility for dewatering the foundation excavations from excavation until acceptance by the masonry contractor and the start of CMU foundation wall installation is the responsibility of the concrete contractor. The masonry contractor will provide dewatering from the start of masonry foundation wall installation to completion of the masonry foundation walls in an area. The roofing contractor will be responsible for dewatering from the start of their waterproofing installation to completion at which time the responsibility for dewatering returns to the concrete contractor through backfilling. Each trade (concrete, masonry, roofing) is responsible for cleaning mud/debris/etc. on existing installations to install their work.
- 6.) The requirement for Contract A-02 to provide BIM was deleted in Addendum No. 2

Response By:	EDiS Company / ABHA	Date:	27 April 2020	
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TO: EDIS C	OMPANY / ABHA	PRE-BID RFI#:076_
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>21 APRIL 2020</u>
PROJECT: <u>EVE</u>	ERETT MEREDITH MIDDLE SCHOOL	_
DWG. # / DETA	AIL:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Old World Tileworks	Date: 21 April 2020

- 1.) Please reference spec section 093000. The manufacture for PWT-1 has informed us that their matching 3x24 Bullnose is only available in a polished finish, not unpolished like specified. They do however have a 3x12 matching Bullnose trim in an unpolished finish. Can you clarify whether you would like to use the 3x12 Unpolished Bullnose or the 3x24 Polished Bullnose? Please note that the field tile PWT-1 is unpolished.
- 2.) Please reference spec section 093000. Can you confirm that the only three approved thinset for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Pro-Lite Premium LHT Mortar
  - b. Custom Building Products MegaLite Crack Prevention Mortar
  - c. Mapei Ultraflex 3
- 3.) Please reference spec section 093000. Can you confirm that the only two approved grouts for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Prism Color Consistent Grout
  - b. Mapei Ultracolor Plus FA (Mapei Ultracolor Plus has been replaced with Ultracolor FA)

- 1.) Provide the 3x12 Bullnose trim in the unpolished finish.
- 2.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.
- 3.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.



Response By: _	Scott Lester, ABHA	Date:	22 April 2020	
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#:077_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Assurance Media	Date: 21 April 2020

- 1.) Outlet with No Designation: Each outlet type in the Communications Outlet Configuration on Drawing E501 shows each outlet having a specific letter designation to then identify what cabling to be installed at that outlet location. Work Rooms: 110, 102E, 210, and 230 all show an outlet, but no letter designation clarifying the type of outlet. Please clarify.
- 2.) Outlet with No Designation: Caft. 146 has an outlet on the side near the MDF that does not have a letter designation. Please clarify.
- 3.) Outlet with No Designation: Learning Commons: 100D, 100H, 200D, 201H each of these spaces show 4 table groups with an outlet in the center of each table group, but no letter designation identifying the type of outlet. Please clarify.
- 4.) Outlet with No Designation: Work Rooms: 144 and 201B have no outlets shown in them. Are there to be any outlets in either of these rooms?
- 5.) D type outlet with no correlating A type outlet: Rooms 102A, 122, 145: These Rooms are not classrooms but in office / administrative areas... There are "D" outlets shown, but no "A" outlets in the same room. By the Communications Outlet Configuration detail on the drawings there is to be a 3.5mm audio connection between the D and A outlets. Unless otherwise informed the 3.5mm audio connection will be eliminated in these areas as there is no A outlet shown. Are there to be any other outlets in these rooms? Possibly a floor outlet under the tables?
- 6.) Wireless Access Points: It appears as though the Auditorium, stage, and mechanical spaces behind the stage area do not show designations for WAPs. Are there to be any in these spaces/areas?
- 7.) CONTRACT NO. A-31 STRUCTURED CABLE Summary / Scope of Work Excerpts:



- a. 9. Structured Cable Contractor will install all network cable within the kitchen and kitchen hoodidentified on the Kitchen Equipment Drawings K-104, K-501, K-502, K-503, K-504. Final location of network drops to be coordinated with the documents, the Kitchen Equipment Contractor, and the Construction Manager prior to installation.
- b. 10. Structured Cable Contractor will install communication wiring from the food managementsystems to the POS devices, menu display boards, and temperature monitoring systems, including terminations on both ends. Final location of the food management systems to be coordinated with the documents and the Construction Manager prior to installation.
  - i. I do not see any designations or network outlets identified on the Kitchen Equipment Drawings K-104, K-501, K-502, K-503, K-504. Please indicate where in the Kitchen the network outlet for the Kitchen hood, and temperature monitoring systems are to be. I do see the "E" outlets on the power drawings showing what I believe is coverage for the POS units and menu board displays in the dining area.

- 1.) They are to be type (E)
- 2.) Type (E)
- 3.) Floor boxes have been deleted and receptacles relocated to walls. See Addendum #6.
- 4.) Add 2(E) centered above the counter for each room.
- 5.) change to type (E)
- 6.) Add 4(B) on each side of the auditorium for WAPS
- 7.) On drawing K-104 there is a Cat 6 wire from each cooler/frezzer box to the office. On drawing K-505, control panel ladder diagram, there is a cat 6 jumper from the control panel to the switches.

Response By: _	EDiS Company / ABHA	Date:	27 April 2020	



TO: SETH HAMMONDS, ABHA		PR	E-BID RFI#:	078	
FROM:	andrew hi	CKEY, EDIS COMPANY	<u>(</u>	DATE: <u>21 AP</u>	RIL 2020
PROJECT: <u>EVE</u>	<u>RETT MERED</u>	ITH MIDDLE SCHOOL	_		
DWG. # / DETAI	L:	SPEC. SECTIONS:	126113	PAGE:	
REQUEST:					
Submitted By:	Davis Furn	iture Company	D	ate: 21 April	2020

- 1.) I would like to submit a Substitution Request for Section 126113 Fixed Audience Seating for the Everett Meredith Middle School located in Middletown, DE.
  - a. Attached please find the completed substitution request form, annotated substitution specification/comparison sheet, Davis Furniture Co. information, Convention Seat Specification, our base fabric selections, a list of completed projects, a sample of our warranty sheet and our ANSI/BIFMA testing results.
  - b. If you review the features of the chairs themselves, you would find that the construction is superior to our competition.
  - c. The biggest difference in our chairs versus our competition is that we offer a gravity lift (counterweight) seat rising mechanism, as opposed to the tension spring seat rising mechanism of old. As you may know, the way a tension spring mechanism works is the spring connected to the seat is put on to a small shaft on either or both sides of the seat. When a person sits on the seat, their weight stretches the spring out, creating tension. When they get up, the tension is released and the seat returns to its "up" position. These springs are lubricated with grease from the factory to allow for proper and quieter initial operation. After use, the grease wears off or gets dirty and the springs lose their tension from being stretched time and time again, which in turn, means the springs require additional lubrication and eventual replacement over time. Our gravity lift mechanism is simple and fail safe. This seat rising mechanism is quiet, maintenance free and cannot fail over time.
  - d. The seat also has a 5/8" diameter solid steel rod that runs all the way through the seat from one support to the next, creating greater stability. This rod is run through two self-lubricating nylon bearings which are held in place by the up and down stops for the seat mechanism. The rod itself has two stops



- welded on it to control when the seat stops. Additionally, these stops are nearly silent as they are outfitted with neoprene bumpers to dampen any noise.
- e. I will let you know that based on published specifications, we use more and a better quality foam and in almost all cases, equal or thicker steel on all seating components.

RESPONSE:			
1.) Substitution is no	ot approved.		
Response By:	Scott Lester, ABHA	_Date:	27 April 2020



TO: EDIS COMPANY	PRE-BID RFI#:079
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>Brightfields</u>	Date: <u>21 April 2020</u>

- 1.) Please answer the questions stated EDiS would ask in Addendum 1 under Section 1.4.2 (a to f)
- 2.) Any liquidated damages?
- 3.) The bid forms are not dated correctly, please clarify if the 21 February bid forms are to be used?
- 4.) Is there an allowance for owner's use in the demolition contract?
- 5.) Please clarify what contract is required to handle the utility disconnects?
- 6.) Please clarify what contract is to handle refrigerant recovery?
- 7.) Which contract is responsible to remove universal waste (light bulbs, batteries form emergency lighting) etc.?
- 8.) How will PCB ballast per handled for disposal of encountered? cost per unit?
- 9.) Based on the proposed schedule, the site work will be started at the same time as demolition, please confirm the demolition contractor will have full access for tractor trailers to drive onsite and turn around in order to remove debris form the site?
- 10.) Who obtains the local demolition permit and pays for the fee?
- 11.)Please clarify if there any required compaction testing for the backfilling of the boiler and auditorium fill areas?
- 12.) If the contract has no involvement with BIM, do I leave the bid form line as "No change" or enter \$0 ?
- 13.)On the demolition contract bid forms, if the alternates listed no longer apply, should I list these as "No change", enter \$0 or leave blank.
- 14.) Has EDiS applied for and obtained an air permit for the crushing operations or will this be the demolition contractor's responsibility?
- 15.) Who pays for the advertisement of the proposed crushing operations for the pending air permit?



- 16.) For onsite crushing, please clarify if brick can be mixed in with the concrete for use as clean fill?
- 17.) For crushing, please clarify if 3" minus is acceptable for crushed concrete?
- 18.) Will the contractor be responsible for the required air monitoring during crushing operations with reporting to DNREC on a daily basis?

- 1.) These were responded to in Addendum No. 4
- 2.) No
- 3.) Use the revised forms issued in Addendum No. 4
- 4.) Yes. See A-01 scope item no. 40.
- 5.) Contract A-30 Electrical is responsible for disconnecting and deenergizing the electrical systems. See A-30 scope item 6. Contract A-27 Plumbing is responsible for all plumbing systems. Contract A-26 Fire Protection is responsible for the fire protection system.
- 6.) Contract A-01 Demolition is responsible for refrigerant recovery. See A-01 scope item no. 10 revised in Addendum No. 2
- 7.) Contract A-01 Demolition
- 8.) According to the Environmental inspection company there are no PCB ballasts. If they are encountered notify EDiS and they will have the abatement contractor remove.
- 9.) The demolition contractor will have full access. A pre-installation meeting with all contractors involved will be held before work begins to coordinate sequence of work and access.
- 10.) The demolition permit with the Town of Middletown will be obtained and paid for by EDiS. Any permits required by DNREC or other agencies are the responsibility of the Demolition Contractor.
- 11.) See the Geotech report for compaction requirements
- 12.)BIM was deleted from the bid form in Addendum No. 4
- 13.)The Demolition Contractor has some work associated with Alternates 9, 10, & 11. A-01 scope item 10 was revised in Addendum No. 2. Scope item #40 was added to the Masonry scope in Addendum No. 2. You should enter the amount of money associated with your participation for these alternates. If this cost is \$0, enter \$0. Do not leave blank
- 14.) The Demolition Contractor will be responsible for obtaining the air quality permit, associated testing, and reporting.



- 15.) The Demolition Contractor
- 16.) We do not recommend using crushed brick as or mixed in with structural fill.
- 17.) See the response to RFI#5 issued in Addendum No.  $4\,$
- 18.) The Demolition Contractor will be responsible for obtaining the air quality permit, associated testing, and reporting.

Response By: _	EDiS Company	Date:	27 April 2020	
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TO: SETH HAM	MONDS, ABHA	PRE-BID	RFI#:081_
FROM: ANI	DREW HICKEY, EDIS COMPANY	DATE: <u>21 Ai</u>	PRIL 2020
PROJECT: EVERET	T MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL: _	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: R	alph DegliObizzi	Date: 21 April	2020
dimensions size for 100	alked to Mike Iacona of Gillespie ind	in drawing P-502 is bigger. Please let us	s not the correct
RESPONSE:			
1.) The grease drawings.	trap is to be the Gillespie 1,000 Gallo	on tank as shown or	n the civil
Response By:	Scott Lester, ABHA	Date:	27 April 2020



IO: SETH HAMMONDS, ABHA	PRE-BID RF1#:082_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>EDiS Company</u>	Date: <u>21 April 2020</u>
<ol> <li>Note 10 on Sheet A-113 for Alternate 2: Maso section A1/A-323. The drawing showing the A5/A-323 is a wall section for the mechanical correct wall section to be utilized when pricin</li> <li>Wall section A2/A-322 (cafeteria wall at the condetail A4/A-513. That detail requires waterprical wall. The detail for the continuation of this waterproofing at the inside face of the waterproofing required only at the curtainway waterproofing start/stop along this cafeteria was section A2/A-323 is a wall section for the mechanical correct wall section to be utilized when pricing at the curtain waterproofing at the inside face of the waterproofing start/stop along this cafeteria wall at the curtain was section as a section of the curtain waterproofing start/stop along this cafeteria wall at the curtain was section as a section of the curtain was a section of the curtain was section of the curtain w</li></ol>	fence calls out Wall Section A5/A-323. area. Please confirm that this is the ng Alternate 2. urtainwalls) calls out the foundation coofing at both sides of the foundation vall outside of the curtainwalls does not be foundation wall. Is this interior alls as shown? If so, where does the
RESPONSE:	
<ol> <li>A5/A-323 is the correct section for the mason to the mechanical yard screen wall in section.</li> <li>Waterproofing is not required on the interior</li> </ol>	
Response By: Scott Lester, ABHA	Date:27 April 2020



TO: SETH HAMN	MONDS, ABHA		PRE-BID RFI#:	083
FROM: AND	REW HICKEY, EDIS COMPANY	DA	TE: <u>21 APRIL 2020</u>	!
PROJECT: EVERETT	MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:	SPEC. SECTIONS:	P	AGE:	
REQUEST:				
Submitted By: Da	altile	Date: _	21 April 2020	
1.) Substitution request contract A-16PWT-1: Please see attached documents for Daltile Society Civic Sand S046 as a proposed product substitution for the above referenced project.				
RESPONSE:				
1.) Approved				
Response By:	Scott Lester, ABHA	Date:	22 April 2020	



TO: <u>EI</u>	DIS COMPANY, ABHA	PRE-BID RFI#:	084_
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020	
PROJECT:	EVERETT MEREDITH MIDDLE SCHOOL		
DWG. # / I	DETAIL:SPEC. SECTIONS:	PAGE:	
REQUEST	? <del>:</del>		
Submitted	By: Nickle Electric	Date: <u>21 April 2020</u>	
pa th pr lo. 2.) Ad pa sc 3.) Pl	CS-101S which is feed from panel PB and Canel PB-102IG that are shown on single line at are located on power drawing E-135? If rovide what type is to be used. Please confined side of CS-xxxx disconnects shown in an addendum #4 provided panel schedules for anels are not located on the single line draw hedules mislabeled or are the panels on the ease confirm that the EC is not responsible es.  ease provide location of distribution panel	e drawing E-502, the disconnect they are disconnect switches ple rm that the EC is not responsible uditorium on drawing E-135. panels PB-103S and PB-104S, buying E-502. Are the Addendum e single line mislabeled?	switches ease le for at these panel
RESPONS	GE:		
re 2.) Re 3.) U	ompany Switch disconnects are to be used sponsible for circuiting/installing company efer to Addendum #6. tility fees will be paid for by the owner. ee Addendum No. 4	, , , , ,	
Response l	By:EDiS Company, ABHA	Date:27 April 2	.020



TO: EDIS COMPANY	PRE-BID RFI#:085
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: H.K. Griffith	Date: 21 April 2020

- 1.) Re: Scope of work for Contract A-08 Roofing, item #12. What existing roofs are scheduled for temporary patch work and where can this be found in the documents? What existing roofs are scheduled to be re-roofed? If this cannot be quantified can an allowance be provided?
- 2.) Re: Scope of work for Contract A-08 Roofing, item #16. Roof curbs are typically provided by the mechanical contractor as they are familiar with the dimensions, design and loads of the equipment they are providing. Can this be removed from the roofing scope and added to the mechanical scope?
- 3.) Re: Scope of work for Contract A-08 Roofing, item #19. What existing roofs are scheduled for permanent patching and where can this be found in the documents? If this cannot be quantified can an allowance be provided?
- 4.) Re: Scope of work for Contract A-08 Roofing, item #20. Where are the skylights located and is there a specification?
- 5.) Section 075300 Membrane Roofing Item 3.07 & 3.08 Cleaning & Protection It is not feasible to protect the entire roof from every single contractor, especially a project of this size. We would recommend that the trades working on the roof provide their own roof protection. Or can an allowance be provided to carry in our bid to for roof protection.
- 6.) The coping above the metal wall panels is an integral part of the metal wall panel system and should be provided by the metal wall panel contractor. This will also assure that the color of the panels matches the coping. Please clarify.
- 7.) Which scope of works owns the spray foam & intumescent coating behind the metal wall panels?
- 8.) Which scope of work owns the self-adhered membrane flashings on drawings A-512, details A3 & A4 from the CMU to the underside of the blocking?



- 1.) There are no existing roofs. This scope item is to be deleted. See revisions to the scope of work included in Addendum #6.
- 2.) Roofing Scope Item 16 was revised in Addendum #5.
- 3.) There are no existing roofs. See revisions to the scope of work included in Addendum #6.
- 4.) There are no new skylights. This scope item is to be deleted. See revisions to the scope of work included in Addendum #6.
- 5.) Each contractor is responsible for protecting adjacent materials during their work, so roof protection will be provided by the trade performing the work over the new roof. Final cleaning of the roof is the roofing contractor's responsibility as required by the specification.
- 6.) Copings at the top of metal wall panels are to be provided by Contract A-09: Metal Wall Panels to match the wall panel color selected. All other copings throughout the school are to be provided by the roofing contractor. Color to be selected from manufacturer's standard selections.
- 7.) Contract A-04: Masonry is to provide all spray foam insulation and associated intumescent coating throughout the project no matter the finish material on top.
- 8.) Self-adhered membrane flashing from the CMU to blocking is to be provided by Contract A-04: Masonry as part of the spray foam insulation installation.

Response By:	EDiS Company	Date:	27 April 2020
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#:086_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Miller Flooring Company	Date: <u>21 April 2020</u>

- 1.) Please confirm the salvaged wood flooring being used on the project is being salvaged by the A-01 Demolition contractor and installed on the project by the A-12 Casework & Millwork contractor.
- 2.) The Finish Legend I-001 lists the WDF-1 & WDF-2 for the gym Wood Flooring lists the wood flooring as Basis of Design Aacer with the Products being listed as Scissor Loc or Robbins Air Channel Star (these are not equal systems) and Specification 096566 lists the floor system for the Gym wood flooring as basis of design Bio-Channel Star which is a different system than both of the floor systems listed in the finish legend. Please confirm the wood floor system to be used for wood gym floor.
- 3.) Please confirm the scheduled finish floor to be used for the Stage Floor is ¼" nominal S2S oil Hardboard, I-001 room finish legend calls for Marlite.
- 4.) Is the Millwork Prime contractor responsible for the Stage Front Edge stain grade wood trim nosing and fascia trim indicated on drawing A-631 detail A-2?
- 5.) In the scope of work for Contract A-19 Wood and Athletic Flooring item #3 for the underfloor ventilation system this is not listed in the specifications and is not required by the manufacturer for the floor systems indicated. Should this system not be provided?
- 6.) In the scope of work for Contract A-19 Wood and Athletic Flooring item #4 it lists room studio theater and practice rooms. The only area we see the hardboard floor being used on project is on the stage. Can you clarify if these floors are being used in areas other than the stage floor?
- 7.) In the scope of work for Contract A-19 Wood and Athletic Flooring, Technical Specification Sections, it lists Section 090561. We have some questions regarding this Specification Section as listed below:



- a. In the scope of work for Contract A-19 Wood and Athletic Flooring, 1.01 Section Includes, it does not list wood flooring. The Specification 096429 Wood Strip Flooring does not cross reference Section 090561 either. Specification 096566 Resilient Athletic Flooring does list Specification 090561 as a related section. Is this scope item listed in the Contract no. A19 Scope in reference to Section 096566 Resilient Athletic Flooring only?
- 8.) In the scope of work for Contract A-19 Wood and Athletic Flooring, Technical Specification Sections, it lists Section 090561. We have some questions regarding this Specification Section as listed below:
  - a. This section lists remedies if the concrete fails moisture testing and indicated to not add this cost to your base bid. There is no place for us to put an Additional cost if it is required after testing the floor and the concrete fails the moisture testing. Should this be added as a add Unit Cost (there is no place on bid form to enter unit cost) if needed or should we carry this cost in our base bid?
- 9.) In the scope of work for Contract A-19 Wood and Athletic Flooring, Technical Specification Sections, it lists Section 090561. We have some questions regarding this Specification Section as listed below:
  - a. If this Section 090561 does apply to the wood flooring The Schonox SDG system is not recommended for the wood flooring because the systems specified require them to be pinned to the concrete with fasteners. Should we use the wood floor manufactures recommended sheet vapor barrier for concrete that fails the moisture testing instead? And what tolerance of Relative Humidity (RH) should it be good up to? Also should this be carried as a unit cost to be added to the contract if it is needed instead of carried in base bid cost?

- 1.) Existing wood flooring is to be salvaged by the demolition contractor and turned over to Contract A-06: Carpentry for installation as new wood platforms. See additional scope items added in this addendum.
- 2.) Refer to revised sheets I-001 and I-601 included in Addendum #5 clarifying floor types to coordinate with Specification Section 096429 Wood Strip Flooring.
- 3.) Refer to revised sheets I-001 and I-601 included in Addendum #5 clarifying floor types to coordinate with Specification Section 096429 Wood Strip Flooring.
- 4.) Confirmed. Contract A-12: Casework & Millwork is to provide stain grade wood trim nosing, fascia, and base along with p-lam façade at the stage front.



- 5.) Scope Item No. 3 is deleted. See changes to the scope of work included in Addendum No. 6.
- 6.) Correct, Studio Theater and Practice rooms do not contain wood floors. See changes to the scope of work included in Addendum No. 6.
- 7.) Section 090561 applies to all flooring related sections including wood strip flooring and resilient athletic flooring.
- 8.) Contractor is to provide moisture tests as indicated and present results to construction manager. Dehumidification or other remediation of moisture in the slab will be provided by the construction manager. Wood flooring contractor is to provide an initial moisture reading and weekly updates until the required moisture reading is achieved.
- 9.) Sheet vapor barrier is specified in 09 6429 Wood Strip Flooring. RH requirements are manufacturer-dependent and the manufacturer's requirement for RH must be met prior to beginning installation.

Response By:	EDiS Company / ABHA	Date:	27 April 2020	
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TO: EDIS COMPANY		PRE-BID RFI#:087_
FROM: ANDREW	HICKEY, EDIS COMPANY	DATE: <u>21 APRIL 2020</u>
PROJECT: EVERETT MEI	REDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: <u>Mason</u>	Building Group	Date:21 April 2020
1.) A-07 - Who own	s the window mullion mate p	per A6/A-631
RESPONSE:		
1.) Contract A-07 M closures. See Ad	ž	responsible for the adjustable partition
Response By:	EDiS Company	Date: 23 April 2020



TO: EDIS COMPANY	PRE-BID RFI#:088_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Mason Building Group	Date:21 April 2020
1.) RFI A-07- Addendum #3 added structural pane A-407. I cant seem to find a A-407 drawing. Wh	
RESPONSE:	
1.) The structural concrete panels are shown on A-	-406
Response By: EDiS Company	Date:23 April 2020



TO: EDIS COMPANY / ABHA	PRE-BID RFI#:089
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Roman Mosaic	Date: 21 April 2020

- 1.) Ref. specification section 011100 Summary of Work, page 4, paragraph 6 Scope of work / General Information, item #I. Will a material hoist be provided by others for free use by the Tile Contractor?
- 2.) Ref. specification section 011100 Summary of Work, page 56, Contract No. A-16: Ceramic Tile, Item #2 Quarry Tile. We note the summary of work for this contract notes to provide Quarry tile however we find no quarry tile scheduled on this project. Are Quarry tile finishes required on this project? if so please indicate where and provide the manufacture, size, color, finish information.
- 3.) Ref. specification section 011100 Summary of Work, page 57, Contract No. A-16: Ceramic Tile, Item #16 Protection. We note the summary of work for this contract notes to provide Protection. We will base the protection of the floors on ramboard with taped seams with maintenance and removal provided by others (as it is impossible to put a price on policing the job site to maintain temporary protection after our work is complete and we are off the job) unless advised otherwise.
- 4.) Ref. specification section 011100 Summary of Work, page 57, Contract No. A-16: Ceramic Tile, Item #15 Patching and Leveling. We note the summary of work for this contract indicates to include patching and leveling. Leveling a substrate can be very expensive when you take into account doorways, etc.
  - a. Is the Ceramic Tile Contractor to include leveling floors scheduled to receive ceramic tile finishes? If so, At the time of the bid the Tile Contractors will not be able to determine the amount of leveling required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.
  - b. At the time of the bid the Tile Contractors will not be able to determine the amount of patching material required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.



- 5.) Ref. specification section 093000 Tiling, page 1, paragraph 1.01.D Section Includes. We note that cementitious backer board are included in this section, however we also note that installation of cementitious backer boards in included in 011100 Contract No. A-07: Metal Studs & Drywall. Please confirm the installation of cementitious backer boards is the responsibility of Contract No. A-07, not Contract A-16?
- 6.) Ref. specification section 093000 Tiling, page 4, paragraph 2.02A.1 Trim and Accessories. We note the specifications indicate that Schluter RONDEC stainless steel non-ceramic trim is to be used at the inside corners, outside corners and top edges of the tile. However the elevations on drawings (i.e. A-425, A-426, etc.) indicate 3"x12" bullnose trim is to be used at the top edges, detail A6/A-421 depicts a Schluter Schiene stainless steel divider strip is to be used at the tile edges.
  - a. Is the wall tile to be finished with Schluter RONDEC at the outside and top edge per the specifications or bullnose tile trim at the wall tile cap and Schluter Schiene at the outside wall tile corners per the drawings?
  - b. Is tile trim required at the inside wall tile corners or are the tiles to be butted together? If tile trim is required at the inside corners please advise the manufacturer, series and finish.
- 7.) Ref. drawing A-425, Toilet Room Elevations, Wainscot bullnose trim. The wall tile bullnose trim is depicted to be PWT-2 tile material based on the Wall Tile Pattern Legend. We will assume all bullnose trim will match the PWT-2 material unless advised otherwise
- 8.) Ref. Drawing I-001, Finish Legend and Notes, Alternates, Alternate 8, Mosaic Floor Tile MFT-1. We note the color was not selected for the mosaic floor tile. Please provide the color selection for the mosaic floor tile as this will impact the price.
- 9.) Ref. Drawing I-001, Finish Legend and Notes, Alternates, Alternate 8, Marble Threshold MT-1. We note the material and color was not indicated for the marble thresholds. Please provide the material and color selection for the mosaic floor tile as this will impact the price.
- 10.)Ref. Drawing I-001, Finish Legend and Notes, Porcelain Wall Tile, PWT-1. We note the tile surface finish was not indicated for the PWT-1 tile. This tile is available in a natural and polished finish. Please provide the finish for the PWT-1 wall tile as this will impact the price.
- 11.)Ref. Drawing I-001, Finish Legend and Notes, Ceramic Wall Tile, CWT-1. We note the color and finish was not selected for the CWT-1. Please provide the color and finish for the CWT-1 wall tile as this will impact the price.
- 12.)Ref. Drawing I-001, Finish Legend and Notes, Ceramic Wall Tile, CWT-2. We note the color and finish was not selected for the CWT-2. Please provide the color and finish for the CWT-2 wall tile as this will impact the price.



13.)Ref. drawing I-601, Finish Schedule, Custodian rooms 217 and 239. We note the finish keynotes on Custodian 217 and 239 refer to finish schedule keynote #20 for wall tile pattern at EWC locations. Are wall tile finishes required in these or any other Custodian rooms? If so, where?

- 1.) No. Each contractor is responsible for their own material handling
- 2.) There will be no quarry tile installed in this project.
- 3.) This is acceptable.
- 4.) Patching and leveling will be taken out of contract allowance. See changes to the scope included in Addendum No. 6.
- 5.) Confirmed.
- 6.) PWT-5 at the Learning Stair (reference A4/I-401 incldued in Addendum #5) is to be finished with the Schluter RONDEC profile at top edges of the tile. Schluter Schiene is to be provided at the oustide wall tile corners per the drawings. All other wall tiles to have coordinating porcelain/ceramic trim.
  - a. Provide Schluter Schient stainless steel divider strip at outside corners per A6/A-421. Tile trim is not required at the inside wall tile corners.
- 7.) All bullnose trim at PWT-2 locations to match PWT-2.
- 8.) MFT-1 to be selected from Group 2 options. Refer to updated sheet I-001 included in Addendum #5.
- 9.) Marble Threshold color to be Carrara White Marble. Refer to updated sheet I-001 included in Addendum #5.
- 10.)PWT-1 to be unpolished finish. Refer to updated sheet I-001 included in Addendum #5.
- 11.)Color of CWT-1 to be selected from Group 2 options. Refer to updated sheet I-001 included in Addendum #5.
- 12.)Color of CWT-2 to be selected from Group 2 options. Refer to updated sheet I-001 included in Addendum #5.
- 13.) Wall tile finishes are not required in Custodian rooms 217 and 239. Refer to updated sheet I-601 included in Addendum #5 with note 20 deleted from Custodian rooms 217 and 239.

Response By:	EDiS Company / ABHA	Date: <u>27 April 2020</u>	
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#: 090
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Roman Mosaic	Date: _ 21 April 2020

- 1.) Ref. specification section 011100 Summary of Work, page 4, paragraph 6 Scope of work / General Information, item #I. Will a material hoist be provided by others for free use by the Terrazzo Tile Contractor?
- 2.) Ref. specification section 011100 Summary of Work, page 58, Contract No. A-17: Terrazzo Tile, Item #2 Mock-ups. The summary of work for this contract indicates to provide a mock up as required by plans and specifications. We find no mock up indicated in specification sections 096616 and 096633. Is a mock up (to remain as part of finished work) required for the Terrazzo Tile scope?
- 3.) Ref. specification section 011100 Summary of Work, page 58, Contract No. A-17: Terrazzo Tile, Item #6 Protection. We note the summary of work for this contract notes to provide Protection.
  - a. We will base the protection of the floors on ramboard with taped seams with maintenance and removal provided by others (as it is impossible to put a price on policing the job site to maintain temporary protection after our work is complete and we are off the job) unless advised otherwise.
  - b. Roman Mosaic and Tile Company always excludes protection of stairways due to safety concerns. We will assume no protection of the stairs will be required unless advised otherwise.
- 4.) Ref. specification section 011100 Summary of Work, page 58, Contract No. A-17: Terrazzo Tile, Item #5 Patching and Leveling. We note the summary of work for this contract indicates to include patching and leveling. Leveling a substrate can be very expensive when you take into account doorways, etc.
  - a. Is the Terrazzo Tile Contractor to include leveling floors scheduled to receive terrazzo tile finishes? If so, At the time of the bid the Tile Contractors will not



- be able to determine the amount of leveling required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.
- b. At the time of the bid the Terrazzo Tile Contractors will not be able to determine the amount of patching material required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.
- 5.) Ref. Specification section 096633 Cement Terrazzo Tiles, page 2, paragraph 2.03E Finish/Texture. We note the specification indicates the terrazzo tiles are to have a polished or honed finish. Since the finish may have an effect on the material price please advise if the tiles are to be priced with a polished or honed finish.
- 6.) Ref. Specification section 096633 Cement Terrazzo Tiles, page 3, paragraph 3.01A Installation. We note the specification refers to section 093000 Tiling for tile installation. We will assume the Terrazzo floor tiles will be installed using thin set unless advised otherwise.
- 7.) Ref. drawing I-001 Finish Legend and Notes, Terrazzo Tile Floor. We note that the finish schedule indicates that the size for TRF-1, TRF-2 and TRF-3 is noted to be "TBD". However specification 096633 Cement Terrazzo Tiles, page 2, paragraph 2.03A indicates the terrazzo tiles are to be 11 13/16" x 11 13/16". We will assume the terrazzo tile size is as noted in specification section 096633 unless advised otherwise.
- 8.) Ref. drawing I-001, Finish Legend and Notes, Stair Coverings, Terrazzo Tread TTR-1. We note the Product and Color was not selected for the Terrazzo Treads. Please provide the product and color for the stair treads as this will impact the price.
- 9.) Ref. drawing I-001, Finish Legend and Notes, Stair Coverings, Terrazzo Riser TRIS-1. We note the Product and Color was not selected for the Terrazzo Risers. Please provide the product and color for the stair risers as this will impact the price.
- 10.)Ref. drawing I-001, Finish Legend and Notes, Finish Legend. We note the Finish Legend includes TRB Terrazzo Tile Base however we find no terrazzo tile base scheduled on this project. We will assume there is no Terrazzo Tile Base required unless advised otherwise.
- 11.)Ref. drawing I-601, Finish Schedule, Stair A. We note the finishes schedule indicate RST-1/RR-1 finishes on the stair however drawing I-111 First Floor Finish Plan Area A depicts for TRF-1 floor finishes on the 1st floor. Are TRF-1 floor finishes required in the base bid at the 1st floor of Stair A as depicted on drawing I-111?
- 12.)Ref. drawing I-601, Finish Schedule, Vestibules 100L and 100N. We note the finishes schedule indicate WCT-1/TRF-1 finishes are required in these vestibules however the adjacent Corridor 100M is scheduled for QT-1, 2, 3 floor finishes. Are Vestibules 100L and 100N to receive TRF-1 floor finishes?



- 1.) No. Each contractor is responsible for their own material handling.
- 2.) Mock-up can remain as part of the finished work.
- 3.) This is acceptable.
- 4.) Patching and leveling will be taken out of contract allowance. See changes to the scope included in Addendum No. 6.
- 5.) Terrazzo tile finish to be polished.
- 6.) Confirmed.
- 7.) Tile size is as noted in specification section 096633. Refer to updated sheet I-001 included in Addendum #5.
- 8.) Product and Color of Terrazzo Tread TTR-1 to be Product: Traditional Series; Color: Graphite. Refer to updated sheet I-001 included in Addendum #5.
- 9.) Product and Color of Terrazzo Tread TRIS-1 to be Product: Traditional Series; Color: Graphite. Refer to updated sheet I-001 included in Addendum #5.
- 10.) There is not Terrazzo Tile Base on this project.
- 11.)See updated finish schedule on I-601 included in Addendum #5 clarifying TRF-1 to be installed in lobby area of Stair 199A. TRF-1 is required in the base bid at the 1st floor of Stair A as depicted on drawing I-111.
- 12.) Provide WCT-1/TRF-1 as shown in Vestibules 100L and 100N.

Response By:	EDiS Company / ABHA	_Date: _	27 April 2020



TO: EDIS CC	MPANY / ABHA	PRE-BID RFI#:091	
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020	
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHOOL		
DWG. # / DETAI	L:SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted Bv:	Dezigns Construction	Date: 21 April 2020	

- 1.) For Contract A-08 Alternate no.2 Decorative CMU screen wall will this alternate be moved to Contract A-04 as the scope of work for the CMU wall is a masonry skilled trade.
- 2.) For Contract A-08 Alternate no. 6 Lightning Protection System will this alternate be moved to Contract A-30 as the scope of work is for the Electrical Skilled trade.
- 3.) Bid Bond requirement states 10% is there a not to exceed amount for the bid bond for Contract A-08? i.e 10% not to exceed \$20k
- 4.) Contract A-08 Summary of Work 011100-38 A.5 States to provide material and labor to install sheet waterproofing at foundation walls. Will this scope of work be moved to Contract A-04 as the scope of work is typically performed by masonry skilled trade.
- 5.) For Contract A-08 Summary of Work 011100-39 A.16 States to provide roof curbs. Will this requirement be moved to Contract A-28 as the scope of work to size and order the roof curbs are typically performed by an HVAC skilled trade.
- 6.) Scope of Work for Contract A-08 #18 States "Provide expansion joints that are integral to the roof." No expansion joints are shown on the plans. Please indicate where expansion joints will need to be installed.
- 7.) Scope of Work for Contract A-08 #20 States "Provide metal framed Skylights including caulking related to the skylight assembly and installation". No skylights are shown on plans. Please indicate where skylights will be located.
- 8.) Some area of parapet walls show a parapet cap that is connected to the exterior wall metal installations. Will this be the responsibility of the exterior wall metals contractor to provide and install or will this be part of the A-08 roofing contract scope of work?



9.) 075300 – 3.02 Metal Deck Preparation states to "install glass fiber insulation strips specified in Section 053100..." however, 053100 does not specify the type or manufacturer of the insulation strips. 053100 3.3.G says installation is specified in division 07. Please provide manufacturer and product to be installed and required execution.

- 1.) Contract A-08 is responsible for providing coping on new screen wall as part of this alternate.
- 2.) Contract A-08 is responsible for flashing and sealing around roof penetrations for the lightning protection system as part of this alternate.
- 3.) No.
- 4.) No.
- 5.) See clarification to the scope of work issued as part of Addendums.
- 6.) An expansion joint is shown on A-131, A2/A-324, D2/A-514 (drawing updated in Addendum #5) and specified in 07 9513.
- 7.) There are no skylights on this project.
- 8.) See changes to scopes of work issued as part of Addendum No. 6.
- 9.) See Contract A-08 Scope of Work Item 4 for clarification.

Response By: _	EDiS Company / ABHA	Date: 27 April 2020
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TO: EDIS COMPANY	PRE-BID RFI#:092_		
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>23 APRIL 2020</u>		
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:		
REQUEST:			
Submitted By: Carrow Construction	Date:23 April 2020		
1.) Who owns foundation waterproofingRoofing scope #5 and concrete scope #16 conflict. A suggestionhave roofer do it all(including elevator pit)it would simplify everything.			
RESPONSE:			
1.) See Addendum No. 5 for foundation waterproofing scope clarifications			
Response By: EDiS Company	Date:23		



TO: SETH HAMMONDS,	ABHA	PRE-BID RFI#:093_	
FROM: ANDREW H	ICKEY, EDIS COMPANY	DATE: <u>23 APRIL 2020</u>	
PROJECT: EVERETT MEREC	DITH MIDDLE SCHOOL		
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: D. Shinn		Date: <u>23 April 2020</u>	
1.) A-131 references Min. ¼" per foot slope for crickets on the roof. If the deck is structurally sloped at ¼" per foot the crickets will need to be Min. ½" per foot. Can this be verified?			
RESPONSE:			
1.) 1/4" minimum is red sloping crickets.	quired and refers to effect	tive slope. This would require 1/2"	
Response By: So	cott Lester, ABHA	Date:27	



TO: SETH HAMMONDS, ABHA	<u>.                                      </u>	PRE-BID RFI#:094	
FROM: ANDREW HICKEY,	EDIS COMPANY DA	ATE: <u>23 APRIL 2020</u>	
PROJECT: EVERETT MEREDITH M	IDDLE SCHOOL		
DWG. # / DETAIL:SPE	C. SECTIONS:I	PAGE:	
REQUEST:			
Submitted By: Farrel Roofing	Date:	23 April 2020	
1.) In volume 1 of the specifications, pg. 486 under the roof scope, paragraphs 12 and 19 mentions patching an existing roof. We were under the assumption the whole school was coming down. Please clarify.			
, 1	is $5''$ of insulation and a $5/8''$ con around R-29. Is okay to install	2	
3.) Where the coping ties in with the wall panel system, we need to coordinate in regards to color. Will it be a standard color or custom metallic color?			
RESPONSE:			
, ,	vork issued as part of Addendu	m No. 6.	
2.) Two layers of 2.6" is acceptable			
3.) The color of the coping at metal wall panels is to match the wall panel color. Coping at metal wall panel locations is to be provided by Contract A-09: Metal Wall Panels. See changes to the scopes issued in Addendum No. 6.			
Response By: Scott Les	ter, ABHA Date:		



TO: EDIS CO	OMPANY	PRE-BID	RFI#:095_
FROM:	ANDREW HICKEY, EDIS COMPA	ANY DAT	ΓΕ: <u>23 APRIL 2020</u>
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHO	OOL_	
DWG. # / DETAI	IL:SPEC. SECTIONS	5:P	AGE:
REQUEST:			
Submitted By:	HK Griffith	Date: _	23 April 2020
the MW of work channel substrat girts be	tal wall panels specified required P manufacturer, which is then a for contract 09 item 1 notes probled Z Girts are not provided by the for the vented hat channel. It removed from the scope of way contract and the vented hat chancel is contract.	installed over the verovide zee furring chathe MWP manufactures are commending the 20 prk in contract 09 and	ertical Z Girts. The scope annels. These Z furring arer, they are simply a Z furring channels / Z I placed into metal
RESPONSE:			
addition	ng to be provided by Contract Anal supplemental furring as received by Contract A-09.	1	1
Response By:	EDiS Company	Date: _	27 April 2020



TO: EDIS COMPANY	PRE-BID RFI#:096_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 23 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: F. R. Beinke Wrecking	Date: 23 April 2020

- 1.) Please confirm the allowances for each contract (e.g. Demo allowance of \$25,000.00) must be in the base bid amount and also confirm that allowance amounts will be deducted in full if there are no change orders.
- 2.) Can the allowances for each bid be placed on the bid forms for clarity?
- 3.) A substantial list of soft demo scope of work items was added in Addendum #2 as scope item #41 to the Demo Contractor's (DC) responsibilities to access Asbestos. DNREC recommends soft demo work to access asbestos be completed by licensed asbestos contractors and workers in order to protect workers and the public from exposure to asbestos. Please consider removing #41scope items and have that work completed by the Asbestos Abatement Contractor (AAC).
- 4.) 3b. Please clarify that the demolition contractor will receive the testing, asbestos clearance reports, and pre-demolition survey(s) by a licensed asbestos inspector needed to obtain the demolition permit.
- 5.) Is the Demo Contractor only responsible for exposing, excavating, and loading 70 Linear feet of foundation walls contaminated with ACM Vapor barrier in the base bid?
- 6.) Instead, would you consider adding a Square Foot unit price for ACM Vapor Barrier foundation wall excavation and loading?
- 7.) What are the calendar day durations allowed for substantial completion of the Building Demolition scope and are there any penalties?



#### **RESPONSE:**

- 1.) Confirmed. The allowance of \$25,000 must be included in the base bid. Any unused allowance will be refunded to the owner at the end of the project.
- 2.) No. The bid forms will remain as published.
- 3.) The scope of work will remain as described.
- 4.) This information will be provided by Environmental Testing Inc.
- 5.) Yes.
- 6.) No.
- 7.) See the construction schedule in Section 013216, issued in Addendum No. 3. There are no liquidated damages in this project.

Response By: _	EDiS Company	Date:26 April 2020



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:097_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>23 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: SecureNetMD	Date: <u>23 April 2020</u>
1.) I don't know if I missed it but is the a legend for data cables?	the electrical drawings showing the
2.) I did not see separate T drawings on the site.	
RESPONSE:	
1.) Data drops are shown on the electrical plans and on drawing E-501.	wiring called out in the schedule
2.) See addendum #6 for outside building data cable 171	e between buildings. Drawing ME-
Response By: Scott Lester, ABHA	Date:27 April 2020



TO: SETH HAMMONDS, ABHA		PRE-BID RFI#:	098
FROM: ANDREW HICKEY, E	DIS COMPANY	DATE: <u>23 APRII</u>	<u> 2020</u>
PROJECT: EVERETT MEREDITH MII	ODLE SCHOOL		
DWG. # / DETAIL:SPEC	SECTIONS:	PAGE:	
REQUEST:			
Submitted By: Roman Mosaic		Date: <u>23 A</u>	April 2020
	ates to provide preca no details referenced kness. ail for these treads, r	est terrazzo treads, rise on drawing A-431 to d isers and landings as t intermediate landings e provided by others (	ers and clarify the this will impact will be
RESPONSE:			
1.) a. Treads will be 2" in thick is a steel stair. b. Install tr			base structure
Response By: Scott Leste	r, ABHA	Date: <u>27 April 20</u> 2	20



TO: EDIS COMPANY	PRE-BID RFI#:099_	
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>	
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:	
REQUEST:		
Submitted By: <u>J&amp;G Building Group</u>	Date: <u>24 April 2020</u>	
<ol> <li>Referencing the 06 Contract, 1 I'm not finding a Architectural Metal Column Covers. I am not localling out for them</li> <li>Referencing the 06 Contract, 3 scope item #43 P spec or anything on the drawings casing out for</li> </ol>	ocating anything on the drawings  OVC railings, again I'm not finding a	
RESPONSE:		
<ol> <li>Metal column covers not required. See previous scopes of work.</li> <li>PVC Railings not required. See previous adderwork.</li> </ol>		
Response By: EDiS Company	Date: <u>27 April 2020</u>	



TO: EDIS COMPANY / ABHA	PRE-BID RFI#:100
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Reybold Construction	Date: <u>24 April 2020</u>
<ul><li>1.) Which contractor is responsible for the grease tra Plumbing contractor?</li><li>2.) What size are the bollards in front of the loading</li></ul>	
RESPONSE:	
<ul><li>1.) Plumbing contractor.</li><li>2.) 6" diameter</li></ul>	
Response By: EDiS Company / ABHA	Date: <u>27 April 2020</u>



TO: EDIS COMPANY	PRE-BID RFI#:101_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 24 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Reybold Construction	Date:24 April 2020

- 1.) A-07 scope #7 & #8 call for air barrier, water resistive barrier and insulation on outside face of exterior walls where spray foam is not indicated. Please confirm these scope items can be removed as there are no locations indicating this. All exterior wall types per A-002 show 3" spray foam and integral intumescent coating by others with no additional air barrier/ water barrier or insulation outside sheathing.
- 2.) A-07 scope #16 notes asphalt felts and Tyvek. Where are these items required as they are not called out on the plans.
- 3.) A-07 scope #18 notes plaster. All items on A-005 and A-006 note Plaster OR Gypsum Board. Confirm Gypsum Board is acceptable and Plaster will not be required on this project.
- 4.) A-07 scope #21 calls for EIFS/ Stucco. Please clarify which one is required. Note 16 on RCP calls for stucco however details A1 & A2 call for EIFS over ½" Cement Board at the same locations. Outside soffit at Entrance vestibule 100L & 100N
- 5.) A-07 scope #47 calls for PVC trim. Where are these items required as they don't appear to be called out on the architectural plans?
- 6.) A-07 scope #25 requires a trash chute. Where will this be installed? Please provide more detail.

#### **RESPONSE:**

1.) There are locations without spray foam that require WRB and insulation, such as at the south and west entrance canopies



- 2.) Asphalt felts and tyvek are not required if not shown on the plans.
- 3.) There is no plaster on this project.
- 4.) Provide EIFS on 1/2" cement board.
- 5.) There is no PVC trim on this project.
- 6.) Trash chute can be premanufactured or constructed of plywood. Location to be located at the 2nd story area A or B as determined in the field and is to remain in place until instructed to be removed by the construction manager.

Response By:	EDiS Company	Date: 27 April 2020
1 ,	* *	



TO: EDIS COMPANY	PRE-BID RFI#: 102
FROM: ANDREW HICKEY, EDIS COMPA	NY DATE: 24 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHO	<u>DL</u>
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By:TJ Distributers	Date: <u>24 April 2020</u>
been responded to. Will there be a future answered?  2.) Page 6 of the Addenda #5 Narrative, page 6 of	cher scope; however, not all of our RFIs have re addendum where our RFIs will be ragraph o.2 indicates that there is no floor misc. equipment in section 116625, paragraph
RESPONSE:	
<ol> <li>All RFIs have been responded to throug</li> <li>Floor covering has been returned to the provided. This over-rules narrative in a exposed area when bleachers are in close</li> </ol>	scope of work and is required to be addendum 5. Flooring cover to cover sed position.
Response By: EDiS Company	Date: <u>27 April 2020</u>



TO: EDIS COMPAN	TY	PRE-BID RFI#:103_
FROM: ANDRI	EW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT M	EREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: <u>Bran</u>	dywine Contractors	Date: <u>24 April 2020</u>
, 0 0	was deleted from carpentry in Acetters added in Addendum 3 at th	ddendum 5, would that include the ne Learning Stair risers?
RESPONSE:		
1.) No. Water jet	cut letter are part of the wall pro	tection at the learning stair risers.
Response By:	EDiS Company	Date:27



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:104_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Kinzer Cast	Date: <u>24 April 2020</u>
<ol> <li>Can the CALCIUM SILICATE STONE SILL be Architectural Precast Concrete? I can send col want to see what our Cast Stone product look</li> <li>Will the GFRC be done on site or do you want</li> </ol>	or samples to you @ no charge if you s like.
RESPONSE:	
<ul><li>1.) Cast stone is acceptable, refer to specification</li><li>2.) Factory fabrication is required by 03 4900.</li></ul>	04 7313
Response By: Scott Lester, ABHA	Date:27 April 2020



TO: SETH HAM	IMONDS, ABHA	PRE-BID	RFI#:105	-
FROM: AN	DREW HICKEY, EDIS COMPANY	DA	ГЕ: <u>24 APRIL 202</u>	<u>20</u>
PROJECT: EVERET	T MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:	SPEC. SECTIONS:	P.	AGE:	-
REQUEST:				
Submitted By:I	Kent Construction	_ Date: _	24 April 2020	-
1.) On A-406 o wall? Pleas	do you want a separate image on ea se advise	ach stair riser	or 1 full image	up the
RESPONSE:				
1.) As shown	on D4/A-406, there are separate image	ages on each	riser of the Lea	rning Stair.
Response By:	Scott Lester, ABHA	Date: _	27 April 2020	_



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:106_		
FROM: ANDREW HICKEY, EDIS COM	MPANY DATE: 24 APRIL 2020		
PROJECT: EVERETT MEREDITH MIDDLE SC	HOOL		
DWG. # / DETAIL:SPEC. SECTIO	NS:PAGE:		
REQUEST:			
Submitted By: Modular Concepts	Date: <u>24 April 2020</u>		
1.) Sheet A427 - Low walls in the auditorium call out section detail E3/A631 (shows laminate panels on only one side of the low wall) and D1/A434 (shows laminate panels both sides of the low walls) at the same location. I would bet that their intent is to use the D1/A434 detail. Can you have the architect verify this?			
RESPONSE:			
1.) Provide plastic laminate panels on	ooth sides. See Addendum No 6.		
Response By: Scott Lester, ABHA	Date: <u>27 April 2020</u>		



TO: EDIS COMPAN	<u>Y</u>	PRE-BID RFI#: _	107
FROM: ANDRE	W HICKEY, EDIS COMPANY	DATE: <u>24 A</u>	PRIL 2020
PROJECT: EVERETT M	EREDITH MIDDLE SCHOOL		
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: Brane	dywine Contractors	Date: _	24 April 2020
	RFI 51 item 6 says carpentry is a sn't this assigned to casework?	responsible for solid	surface wall
RESPONSE:			
, <u> </u>	in Addendum No. 6. Solid sur 12 : Casework & Millwork.	face wall protection	is to be provided
Response By:	EDiS Company	Date: _	27 April 2020



TO: EDIS COMPAN	NY / ABHA	PRE-BID RFI#:108_
FROM: ANDR	EW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT N	MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: D.S	hinn	Date: 24 April 2020
A-09 summar If this portion for Spray Foa 2.) Quick question	y of work does not include this. Of work falls under Contract A-Om installers? on, A-131 references Min. 1/4" per sucturally sloped at 1/4" per foot the	intumescent coating however contract Can you clarify who is to pick this up? 19, could a sub-contract line be added foot slope for crickets on the roof. If the crickets will need to be Min. 1/2" per
RESPONSE:		
1.) Spray foam ir Contract A-04	sulation and associated intumeson: : Masonry.	cent coating is to be provided by
2.) 1/4" refers to 1	minimum slope. Crickets will req	uire 1/2" slope to meet this minimum.
Response By:	EDiS Company /ABHA	Date: <u>27 April 2020</u>



TO: EDIS COMP.	ANY	PRE-BID RFI#:109_	
FROM: ANI	DREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>	
PROJECT: <u>EVERET</u>	T MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL: _	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: K	nott masonry	Date:24 April 2020	
•	heet A-412 calls for split face block view. Can you please clarify?	k in the theater below 23' and where	
RESPONSE:			
1.) Per note 1, all CMU on the east and west walls are to be split face block below 23' including behind drywall columns. All block above 23' is to be standard CMU painted. The north and south walls of the theater are covered in drywall can can be standard CMU.			
Response By:	EDiS Company	Date:27 April 2020	-



ГО: EDIS COMPANY	PRE-BID RFI#:110_
FROM: ANDREW HICKEY, EDIS COM	MPANY DATE: 24 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SC	<u>HOOL</u>
DWG. # / DETAIL:SPEC. SECTIO	NS:PAGE:
REQUEST:	
Submitted By: <u>Carrow Construction</u>	Date: <u>24 April 2020</u>
that is the reason for the stego wrap	on drawingsdo you even need caulking,  The caulking was eliminated at Whitehall for elease tell us exactly where and we will price
RESPONSE:	
<ol> <li>Provide caulk only if shown on dra provide premolded joint filler.</li> </ol>	wings. Concrete contractor is responsible to
Response By: <u>EDiS Company</u>	Date:27



TO: SETH HAMMONDS, ABHA		PRE-BID RFI#: 018
FROM: ANDREW HICKEY, EDIS COMPANY	_	DATE: 27 MARCH 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	_	
DWG. # / DETAIL:SPEC. SECTIONS:		PAGE:
REQUEST:		
Submitted By: EDiS Company	Date:	27 March 2020

- 1.) S-004 There are 4 different schedules for lintels, either concrete or steel, on this sheet. One of the schedule has tags L-1 to L-4 that correspond to marks on the plans. Can you clarify where the other types of lintels are to be used throughout the project. It makes a difference on how the Masonry and Steel contractors price the work.
- 2.) S-101 can you provide dimensions on the larger scale plans S-111 to S-115? The overall plans are too small to read.
- 3.) The open triangle symbol on line intersection of A.I and B.2 is not shown in the drawing symbols on S-001. This symbol is repeated throughout sheets S-102 and S-103.
- 4.) S-111 shows a stepped footer between column lines A5 & A6 on AB. There are no underground pipes shown on the MEP drawings at this location. Is a step footer required?
- 5.) S-111 shows a stepped footer between column lines A1 & A2 on AB. The invert of the 6" pipe at this location is 51.50' as shown on P-101. The top of footer adjacent to the step is 54.83'. This requires a 3.33' drop in a very short distance. The stepped footer detail on S-501 has a maximum step height of 1'-4". Provide clarification on how to install the step at this location.
- 6.) S-111 Why are there 2 stepped footings at east side of the stairs on line A.G near line A.5?
- 7.) S-114 What is the elevation of the S-4 slab in the Gym? Is this to be depressed 2-1/8" like the adjacent S-1 slab?
- 8.) S-114 Note 7 states "TSF" indicates thickened slab footing. See Section indicated for additional information. There don't appear to be any sections indicated on the TSF's in the locker room area. Provide sections and clarify requirements.



- 9.) S-115 There are turned down slabs between E.L & E.N and E.2 & E.3. There is also sidewalk at these locations shown on the civil drawings. Provide clarification on which drawings are to be followed Civil or Structural.
- 10.)S-115 shows the slab at the stage at elevation -0.25′. The slabs adjacent to the stage are at elevation 0.0′. Provide clarification where the step between 0.0 and -0.25′ is to occur.
- 11.)S-115 Detail mark 7/S-504 around the columns on either side of the proscenium on column line E.12 shows CMU around the columns. Detail 7 on S-504 shows a tube column with plates attached back to the H columns. However this detail doesn't show the CMU and how it interfaces with the columns. Can you update detail 7 to include the CMU?
- 12.)S-121 The section mark through the window between lines A.J and A.I on the wall on line A.14 is shown as 4/S-514. This section doesn't show the window. Should it be 3/S-514?
- 13.)S-121 There is a lintel between column lines A.3 & A.4 on line A.J. The lintel tag is covered by the beam tag W24x55. Please provide the lintel type at this location.
- 14.)S-122 There is a section mark 4/S-503 through the NBL on the east side of the stair tower. The section on S-503 is through the foundation and the NBL is not shown. Please provide a section through this location.
- 15.)S-131 At the south stair tower, there are 3 20K5 bar joists that intersect the east wall over top a L1 lintel. Confirm that bearing plates are required in the CMU wall above the lintel.
- 16.)S-131 There is a lintel shown in the north wall of the south stair tower on column line A.14. There is no opening in this wall on the architectural drawings. Please resolve discrepancy.
- 17.)S-131 Should the lintels crossing the corridor, at the entrance to the stair tower on column line A.14, be steel or concrete?
- 18.)S-132 At the north stair tower, there are 3 20K5 bar joists that intersect the east wall over top a L1 lintel. Confirm that bearing plates are required in the CMU wall above the lintel.
- 19.)S-132 Should the NBL lintels crossing the corridor, at the entrance to the stair tower on column line B.1, be steel or concrete?
- 20.)S-134 The roof drains on column line D.7 are in conflict with the steel. Coordination is required with the architectural and plumbing drawings. Provide a centerline distance from column line D.7 to the center of the drains.
- 21.)S-135 The roof drains on column line E.T at E.5 & E.18 are in conflict with the steel. Coordination is required with the architectural and plumbing drawings. Provide a centerline distance from column line E.T to the center of the drains.



- 22.)S-141 There appear to be column covers around the columns in the auditorium. Provide the wall type at these locations.
- 23.)S-201 Shows deck type D-5 over the "Learning Stairs". What is the material for the steps and risers to the left of the Learning Stairs?
- 24.)S-202 Section 4 What is the material that fills in between the HSS beams that are on the outside of the building at the entrance?
- 25.)S-202 Section 7 How is the tube steel lintel that supports the cast stone veneer connected to the floor beams that are above the tube steel and perpendicular?
- 26.)S-501 The typical concrete stair details show the risers being angled. What is the angle of the risers? Is nosing or tread inserts required? Is reinforcing along the tread noses required?
- 27.)S-501 There is a Typical Bollard Detail on this sheet. The Civil drawings only show decorative bollards. Are 8" steel bollards to be used on the project?
- 28.)S-505 Section 1, the detail calls out Ivany block. Can another manufacturer be used? Section 042000 calls out Standard Units.
- 29.)S-505 Section 1, what is the size and spacing of the vertical reinforcement?
- 30.)S-505 Detail 3 shows 1/2" pre-molded joint filler between the slab and the wall. The detail shows this joint filler recessed into the CMU wall. Confirm that the joint filler can be applied to the surface of the CMU wall without recessing.
- 31.)S-516 Some of the sections call for L4x4x5/16 angles at the roof deck and other sections call for 1/4" bent plate. Why are 2 different materials required?
- 32.)S-518 Section 7 has a note to "See Plan" for the T.O. Parapet elevation. The elevation is not shown on structural plans. Please provide elevation.
- 33.)S-519 Section 1 through the head of the proscenium shows 2 HSS Built-up beams. Provide clarification of how these beams are intended to be connected to the C6 columns on either side of the proscenium.
- 34.)S-520 Section 3 There should be a metal stud knee wall at the base of the metal panel wall similar to Section 1 on S524
- 35.)S-522 Section 1 shows the configuration of the framing at the Learning Stairs. This shows each landing overhanging the vertical riser that supports it by a few inches. This does not match the configuration shown in Section C1 on A406 for the Learning Stair Seats. Need to resolve conflict.
- 36.)S-523 The sections show the deck construction at the Control Booth to be concrete, while the note shows "T.O. Plywood". Provide clarification.
- 37.)S-524 Section 1 shows the metal stud knee wall at the base of the metal wall panel. Is this knee wall to be mounted to the face of the CMU or should it be mounted to the roof deck. We think it should be mounted to the roof deck.



- 38.)S-524 Section 1 the metal wall panel is shown to go past the knee wall and below the roof level. The metal wall panel should stop above the knee wall. This conditions existing on other sections.
- 39.)S-525 Section 6 There should be a metal stud knee wall at the base of the metal panel wall similar to Section 1 on S524
- 40.)S-525 Section 4 shows the metal stud knee wall at the base of the metal wall panel. Is this knee wall to be mounted to the face of the CMU or should it be mounted to the roof deck. We think it should be mounted to the roof deck.
- 41.)S-526 Section 5 shows a ¼" bent plate above the wide flange beam at the metal studs. Inside is a concrete symbol. Is this intentional or a graphic error?
- 42.)S-526 Section 2 shows the metal stud knee wall at the base of the metal wall panel. Is this knee wall to be mounted to the face of the CMU or should it be mounted to the roof deck. We think it should be mounted to the roof deck.

#### **RESPONSE:**

- 1.) 1. Concrete/ Steel Lintel Schedule (6" non-bearing walls) is used at all 6" CMU non-bearing walls for openings up to 10' wide. 2. Non-Bearing and Loose Lintel Schedule is used at all loose lintels for 4" brick veneer, 4", 8", and 12" non-bearing CMU block openings up to 8'-0" wide. 3. Steel lintel Schedule (8" CMU w/ 4" Brick, non-bearing walls) not required. Drawings will be updated accordingly. 4. Steel lintel Schedule is to be used where identified on Structural framing plans and sections. See Addendum #5 for revised lintel schedules on Sheet S-004
- 2.) All dimensions to be coordinated per architectural drawings.
- 3.) It is identified on S-001 "Structural Plan Notation" as moment connection symbol. The open triangle is a wind moment connection.
- 4.) No stepped footing shown in this location. Please verify that the latest "02/21/2020 ISSUED FOR BID" drawings are referenced.
- 5.) See Addendum #5 for revised stepped footing layout
- 6.) Portion of stair shaft wall footing is too close to the spread footings at -3' t.o. footing elevation. Wall footing needs to drop along those locations of influence.
- 7.) Yes, S4 slab is depressed 2-1/8" like the rest of the Gym.
- 8.) See Addendum #3 issue
- 9.) Provide 5' concrete pad with TDS entrances to the building (coord. w/ arch for locations), sidewalk beyond per civil drawings. See Addendum No. 3
- 10.) See Addendum #5 drawings



- 11.)See Addendum #3 issue for structural detail 7/S504. See Addendum #5 a-312 and A-427 for revised architectural details at proscenium opening.
- 12.) There is no window between A.J and A.I. The beam tag W12x48 is over top the wall symbol and makes it appear to be a window.
- 13.) See Partial Framing Plan on S-201 for the framing information.
- 14.) See Addendum #3 issue Incorrect section marker removed.
- 15.)Bearing plates are required beneath all bar joist seats. See Section 4 on S515. The lintel is required at the head of the window on the same wall. See the architectural drawings for the lintel's elevation.
- 16.)No Lintel is needed at this location. The background has been updated. See Addendum No. 3
- 17.) See question 18.1 above and Addendum #5 for revised lintel schedule
- 18.) Bearing plates are required beneath all bar joist seats. See Section 4 on S515. The lintel is required at the head of the window on the same wall. See the architectural drawings for the lintel's elevation.
- 19.) See question 18.1 above and Addendum #5 for revised lintel schedule
- 20.)Roof drains are typically 1'-6" centered away from the parapet face. Dimensions have been added to the roof plan for addendum #3. We do not see a structural/plumbing conflict.
- 21.)Roof drains are typically 1'-6" centered away from the parapet face. Dimensions have been added to the roof plan for addendum #3. We do not see a structural/plumbing conflict.
- 22.) These are furr-outs. See Addendum #3 for partition types on A-427
- 23.) Floor sheathing is 'D5' at the learning stair. Coordinate with architectural drawings for the actual finishes.
- 24.)'S1A' Concrete See Addendum #5 drawings
- 25.)HSS beam supports the floor beams (not the other way around) and are framed into the HSS columns. Provide a 1/4" weld on each side or provide (2) 3/4"Ø Hollo-Bolts from WF bottom flange to top of HSS. See Addendum No. 3
- 26.) Nosing must be 1" projection. Coordinate in field for angle requirement based on the actual riser height. Nosing or tread inserts are not required. Reinforcing requirements are shown on S501. Reinforcing is not required at the tread noses.
- 27.) No. Standard bollard is 6" per S-501 and Section 055000.
- 28.) No Ivany blocks must be used.
- 29.) See Addendum #5 Drawing S-505
- 30.) Drafting error joint is not recessed. Reflected in Addendum #3 issue
- 31.)L4x4 is used at joist bearing conditions, in other locations, typically parallel to the beam it is bent plate as the edge distance can vary.
- 32.) Coordinate with architectural drawing A-513



- 33.)See Addendum #3 issue
- 34.)See Addendum #3 issue
- 35.)See Addendum #3 issue
- 36.)Typo It is concrete on metal deck (S2). Reflected in Addendum #3 issue
- 37.)Drafting error see Addendum #3 issue
- 38.) Metal panel detailing to be coordinated with architectural drawings. Architectural model in Structural sections is for reference only.
- 39.)See Addendum #3 issue
- 40.) Drafting error see Addendum #3 issue
- 41.)Drafting error see Addendum #3 issue
- 42.) Drafting error see Addendum #3 issue

Response By:	Scott Lester, ABHA	Date: <u>22 April 2020</u>
1 3		<u> </u>



TO: EDIS COMPANY / A	BHA	PRE-BID RFI#: 045
FROM: ANDREW H	ICKEY, EDIS COMPANY	DATE: <u>14 APRIL 2020</u>
PROJECT: EVERETT MEREL	DITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: Nickle Ele	ctric	Date: 14 April 2020

- 1.) Theatrical A/V scope states that the EC is to provide all devices indicated on the drawing. Please confirm that the EC is only to provide electrical devices (i.e. receptacles, line voltage switches) and all other special system devices will be by others.
- 2.) Please provide updated single line drawing to show feeder requirements and what panel/switch board feeds originate from for panels KP-1, KP-2, KP-3 and MP-1.
- 3.) Please provide panel schedules and details for panels PB-101S, PB-102S, PB102IG and PB-201S.
- 4.) Please provide locations in the building where switchboard SDP and PB are to be installed.
- 5.) Will contact A-22 be responsible for furnishing and mounting all electric battens in the auditorium area?
- 6.) Electrical summary of work #31 states that contract C-21 is to provide all device boxes, underground conduit and conduit to above accessible ceilings with pull strings. Please confirms that is, not contract C-21.
- 7.) Please confirm the contract that is responsible for furnishing and installing the motorized line sets called for in Alternate #7 Orchestra Shell.

#### **RESPONSE:**

1.) Correct. Electrical Contract is to provide rough wiring and electrical devices (receptacles, line switches, etc). All A/V devices are to be provided by Contract A-21.



Electrical Contract is to provide all device boxes and conduits with pull strings for A/V control wiring and devices.

- 2.) See Addendum No 4.
- 3.) See Addendum No 4.
- 4.) See Addendum No 4.
- 5.) Electrical battens and associated cable cradle is to be provided by Contract A-22: Theatrical Rigging. Contract A-30: Electrical is to supply and install performance lighting outlet devices, hanger brackets, and multicable assemblies.
- 6.) Correct, reference to Contract C-21 was made in error. Delete reference to Contract C-21 and replace with Contract A-30.
- 7.) Acoustic shell motorized line sets are to be supplied and installed by Contract A-22: Theatrical Rigging. Electrical contractor is to coordinate and provide power to the motorized linesets.

Response By:	EDiS Company / ABHA	_Date:	23 April 2020
1 3	1 7		•



TO: EDIS COMPANY			PRE-BID RFI#:	047
FROM: ANDREW	V HICKEY, EDIS COMP	ANY_	DATE: <u>14 APR</u>	<u>IL 2020</u>
PROJECT: EVERETT ME	REDITH MIDDLE SCHO	OOL		
DWG. # / DETAIL:	SPEC. SECTIONS	5:	PAGE:	
REQUEST:				
Submitted By: Brandy	wine Contractors		Date: 14 April 2	020
1.) Looks like double coverage on the projection screens. Carpentry item 21 and theatrical A/V item 2.				
RESPONSE:				
1.) The projections screens are to be provided by Contract A-06 Carpentry and General Work. Section 274117 was revised to delete the projection screen.				
Response By:	EDiS Company	Date:	24 April 2020	



TO: EDIS COMPANY / ABHA	PRE-BID RFI#:049_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 15 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: TJ Distributers	Date: 15 April 2020

- 1.) Contract No. A-20 paragraph A.8 indicates that the contractor is to provide wrestling mats, storage, and accessories. Can you please confirm that the A-20 contractor is to provide these materials? If to be provided, please provide a specification included in section 116625.
- 2.) Contact No. A-20, paragraph 10 indicates that a group control system is to be provided; however, drawing E-134 indicates key-switch operation for the electric gymnasium equipment. Can you confirm if the group control system is to be provided and if so, can you please provide a specification?
- 3.) Contract No. A-20 paragraph 10 indicates that a ceiling suspended batting cage is to be provided; however, this batting cage is not specified in section 116625 nor is it mentioned in the drawings. Can you please confirm that the A-20 contractor is to provide and install a ceiling suspended batting cage and if so, can you please provide a specification?
- 4.) Contract No. A-20, paragraph 10 indicates a scorer's table is to be provided; however, no scorer's table is mentioned in section 116623 pr 126613 nor is it mentioned in the drawings. Can you please confirm that the A-20 contractor is to provide a scorer's table and if so, can you please provide a specification?
- 5.) Section 116625, paragraph 2.03 specifies a divider curtain but does not specify a safety lock for the drive system, this will prevent the curtain from free-fall in the stored position if a motor or gear box fails. Will a curtain lock be required for the divider curtain?
- 6.) Section 116625, paragraph 2.06.A.1. specifies a floor cover and transport system. Can you please confirm that the floor cover is to cover the gymnasium basketball court including the flooring area exposed when the bleacher is in its closed position?



- 7.) Section 116623, paragraph 2.06.B.1.a specifies team name and intelligent captions 100% electronic. Can you please confirm that the scoreboard team names are to be electric LED digits and not vinyl applied directly to the scoreboard?
- 8.) Section 116625, paragraph 2.06.B.2 description does not match the product specified in paragraph 2.06.B.2.a. This product is a scoreboard, not a control console. The Daktronics control console specified in paragraph 2.06.B.2 is the #AS-5000. Can you please revise the product specified in paragraph 2.06.B.2.a?
- 9.) Drawing 411, sheet note #2 indicates that the wall padding should wrap front and sides of furr-out but drawing A-114 does not show some of these columns having pads that wrap around the corners of the columns. Can you please confirm that the wall padding is to completely cover the furr-outs except for the (4) corners of the gymnasium and the (3) bleacher wall columns?
- 10.) Section 126113, paragraph 1.07.G has a requirement to include samples finishes with the bid. Can you confirm that this is not a requirement for bid submission?
- 11.)Contract No. A-23: Theater Seating, item #2 indicates that the contractor is to provide fixed, removable, and loose audience seating; however, no loose audience seating specification is provided. Is the loose audience seating apart of this scope, if so can a specification be provided for this seating?
- 12.) Drawing TS-1.10 shows eight seats at the sides without numbers. Can you please confirm that these chairs are the loose seats?
- 13.)Section 126613, paragraph 2.02.A.6 specifies the wheelchair spaces to have removable railings at row two behind wheelchair spaces but these are not required by building code and are cumbersome to set up and take down. We would recommend not requiring rails at the recoverable ADA spaces. Will removable rails be required for the ADA spaces?
- 14.) Section 126613, paragraph 2.02.C.2 specifies a row rise of 11-5/8-inch. This 11-5/8-inch row rise would create a 2-inch gap between rows when in the closed positions, which creates a ladder affect and can damage the bleachers support arms when in the stored position. Will it be acceptable to provide 9-5/8-inch (10-inch nominal) row rise to prevent these potential operational issues?
- 15.)Section 126613, paragraph 2.02.E.4 specifies limit switches which are typically used when the gymnasium floor is synthetic to prevent the bleacher motor wheels from spinning and ruining the floor; however, the gymnasium floor is to be wood wood floors do not require the limit switches. Can you please confirm that limits switches are to be provided?
- 16.)Section 126613, paragraph 2.03.A.2 specifies seats with back supports as shown. These back supports are not shown on the drawings and also not compatible with 22-inch row spacing. Can you please confirm that back supports for the bleacher seats are not to be provided?



- 17.)Section 126613, paragraph 2.03.B.1.c specifies plywood thickness of 3/4-inches. All of the specified manufacturer's standard plywood thickness is 5/8-inches. Will 5/8-inch plywood decking be acceptable?
- 18.) Section 126613, paragraph 2.03.B.4 specifies nosing to be extruded aluminum with a clear anodized finish; however, all of the specified bleacher manufacturer's standard nose is galvanized steel. Can you please confirm that the manufacturer's standard galvanized steel nosing is acceptable?

#### **RESPONSE:**

- 1.) Wrestling mats and accessories are not required. This scope item will be deleted in Addendum No. 5
- 2.) Provide key-switch operation as shown and specified. There is not a group control system.
- 3.) Batting cages are not required. This scope item will be deleted in Addendum No. 5.
- 4.) Scorer's table is not required. This will be an FF&E item. This scope item will be deleted in Addendum No. 5.
- 5.) Provide a safety lock.
- 6.) Flooring cover to cover exposed area when bleachers are in closed position.
- 7.) Electronic captions as specified.
- 8.) #AS-5000 is the correct product number for the control console.
- 9.) Padding should wrap the front and sides of the furr-outs, except for the (4) corners of the gymnasium and the (3) bleacher wall columns
- 10.) Samples are not required with the bid.
- 11.)Loose seats will be specified as FF&E and are NIC.
- 12.) Correct, the 8 seats without numbers are loose seating.
- 13.)Provide removable rails as specified.
- 14.)Provide 11-5/8" row rise as specified.
- 15.)Limit switches to be provided as specified.
- 16.) Back supports are not required. Refer to Addendum #6.
- 17.)5/8" plywood is acceptable.

18.)Galvani	zed steel nosing is acceptable.			
Response By:	EDiS Company / ABHA	Date:	27 April 2020	



TO: <u>S</u>	ETH HAMMONDS, A	ABHA	PRE-BI	ID RFI#:	057_
FROM:	ANDREW HIG	CKEY, EDIS COMPANY	<u>′</u> D.	ATE: <u>16 AP</u> 1	RIL 2020
PROJECT	: EVERETT MEREDI	TH MIDDLE SCHOOL	<u> </u>		
DWG. # /	DETAIL:	_SPEC. SECTIONS:		PAGE:	
REQUES	Γ:				
Submitted	l By: <u>Patriot Insu</u>	lation		Date: <u>1</u>	6 April 2020
2.) W P su th 3.) W ir	gid fiberglass board Jill the pipe insulat VC jacket? I unders urfaces getting pain ne paint better than Jill the 10" round ro	ion in the cafeteria roo stand the ceiling finish ited by others. The AS the PVC jacket. un out duct in the aud and the rectangular d	om 146 be cons is "expo A" w I finish on the	idered exp hich is ope pipe coveri	osed and require en ceiling with all ing will "hold"
RESPON	SE:				
3.) T	es, PVC jacket can l he round runouts a	oe omitted in this areare to be internally line out Lester, ABHA	ed, no exterior	insulation :	-
_				_	



TO: EDIS COMPANY, ABHA	PRE-BID RFI#:059_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>17 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Nickle Electric	Date: 17 April 2020

- 1.) Please confirm that Type "U" fixtures in dress rooms 171 and 172 on drawing E-115 are (1) linear run along each wall.
- 2.) Please provide detail of theater seat light termination noted in general note #7 on drawing E-135.
- 3.) Please provide details and information on the type and number of cables and or wires needed for power and control of theater seat lighting shown on drawing E-135.
- 4.) Rehearsal station RS-1402 on drawing E-135 calls for (4) 20A circuits from PB-103S, but rehearsal station RS-1401 does not call for any circuits. Is RS-1401 to be fed from RS-1402 or should it have its own dedicated circuits? If it is to have its own dedicated circuits please provide number of circuits, amperages and conduit size.
- 5.) What is the EC required to provide for symbols RC-1 through RC-4 shown on schedule of drawing E-135?
- 6.) Please clarify fire alarm note on drawing E-155 as to what exactly the EC is to provide.
- 7.) Please provide missing sheet number for schedule note #1 on drawing E-181.
- 8.) Please provide details called out in schedule notes #5 and #6 on drawing E-181.
- 9.) Please provide locations and Electric Schedule details for items #45,46,47 and 48 called out in schedule note #6 on drawing E-181.
- 10.)Detail of communications duct bank "A" on drawing E-501 shows leveling blocks underneath the concrete encasement in the trench. Please confirm if leveling blocks will be required for this work.
- 11.)Detail for direct buried conduit on drawing E-501 shows using clean sand and select fill dirt for backfilling. Will reusing existing material be sufficient for backfilling?
- 12.) The notes at the bottom of the equipment schedule on drawing E-602 state that the EC is to furnish fire alarm duct detectors for installation by others and then be



- responsible for all final connections to unit and fire alarm control panel. Please confirm that these devices and their connections are to be done by the special systems contractor.
- 13.) Please provide AIC ratings for all branch panels on drawings E-603, E-604 and E-605.
- 14.)On drawing ME-171 it shows (2) 4' conduits for primary power running across the roadway and stopping just on the other side. Is the EC to dead end the conduits in this location to be finished at a later date by others? Should there be a certain amount of cable slack left at the end of this run for terminations by others?
- 15.)Details on drawing A-006 show requirements for airtight installation. Will the general trades be responsible for the installation of pads, caulk, grout, etc. in this work?
- 16.) "R" symbol in Science room #225 on drawing E-142 we assume to be a power cord reel based on circuit description in branch panel board. If these are power cord reels please provide manufacturer and model number along with specific mounting detail if required.
- 17.)In Science room #225 on drawing E-142 there appears to be box structures around the assumed cord reels. According to drawing A-152 sheet keynote #7 these are unistrut power systems w/ reels. What contract is responsible for furnishing and installing the unistrut supports and reels? Can a mounting detail be provided?

#### **RESPONSE:**

- 1.) Refer to A4/A-443 for configuration of lights in the dressing rooms.
- 2.) Means and methods. Coordinate with seating contractor
- 3.) 2#8+#10G
- 4.) RS-1401 only contains connections to low-voltage control wires, no line-voltage circuits.
- 5.) Conduits, pullstrings and back boxes.
- 6.) Conduits, pullstrings and back boxes.
- 7.) See Addendum No. 5
- 8.) See Addendum No. 5
- 9.) These are portable items powered from convenience duplex receptacles.
- 10.)Leveling blocks are not required.
- 11.)Provide sand and select fill as detailed.
- 12.)See Addendum No. 5
- 13.)See Addendum No. 5
- 14.) This work will be by the Town of Middletown. See Addendum No. 4 for clarifications in the scope of work.



- 15.)Electrical contractor is to provide sheet caulking or outlet box pads as shown and inwall insulation around conduits. Mechanical/Plumbing is to provide insulation at ducts and pipes as shown. All trades are to cut their insulation to wall face as shown. Drywall Contractor is to provide drywall surrounding outlet boxes and acoustic sealant where shown.
- 16.) Mounting detail for power reels is on E1/A-151.
- 17.)See detail E1 on architectural drawing A-151. E.C to furnish and install unistrut support and reels.

Response By:	EDiS Company, ABHA	Date:	27 April 2020	
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TO: EDIS COMPANY	PRE-BID RFI#: 066	-
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>17 APRIL 202</u>	<u>0</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:	
REQUEST:		
Submitted By: North East Contractors	Date: <u>17 April 2020</u>	
<ol> <li>SOW #13 – what spec section do the acoustic reflet this project?</li> <li>SOW #20 – the third sentence in the paragraph is furnish and install the fire insulation at the edge of the solution of the specific section of the specific section.</li> <li>SOW #47 (appears after SOW #21) – I am not find also nothing in the spec book. Am I missing information.</li> </ol>	telling the bidder that the of 2nd floor slabs, correct ling PVC trim/panels on t	ey must ?
RESPONSE:		
<ol> <li>The acoustic reflector is the GWB Acoustic Reflection drawings A-145.</li> <li>Correct.</li> <li>Metal Stud &amp; Drywall Scope item 47 is to be deleted the project. See Addendum No. 6</li> </ol>		C
Response By: <u>EDiS Company</u> I	Date: <u>26 April 2020</u>	-



TO: EDIS CO	MPANY	PRE-BID RFI#: 067
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>20 APRIL 2020</u>
PROJECT: <u>EVER</u>	ETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAII	L:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Reybold Construction	Date: 20 April 2020

- 1.) Drawing C-110 has several domestic water services coming off the 8" main with 8" Tees and 8" valves. An 8" tee and valve seems excessive for a water service. Can we accomplish these connections with service saddles and corporation stops instead?
- 2.) How thick is the stone layer shown on drawing A-113 in the turf and stone area adjacent to the loading dock? What type of stone is to be used?
- 3.) Where on the architectural drawings does it show details of the 8' high by 8' wide double gates shown on drawing C-110 where the waterlines enter the building?
- 4.) Are there Fire Marshall plans that show the striping and signage called out in sitework SOW item 2?
- 5.) Is there a drawing depicting the layout of the roof drain system called out in sitework SOW item 6?
- 6.) Please elaborate on sitework SOW item 33. Who is responsible for installing new light pole bases?
- 7.) Please elaborate on sitework SOW item 41. The concrete contractor is to backfill the foundations. Why is this in SOW item 41?
- 8.) Sitework SOW items 24 and 49 are in conflict. Which is correct?
- 9.) Please clarify sitework item 47. Define maintenance of the access roads. What is the extent of sitework contractor responsibility?
- 10.) Sitework SOW item 50, does this include all landscaping onsite as well as the planting in the bioretention areas?
- 11.) Sitework SOW item 53, is there sod on this project and if so, where?
- 12.)Sitework SOW item 59, what is the required for as-builts of the SWM facilities? Are redline drawings acceptable?



#### RESPONSE:

- 1.) The sizes of the water services to the building (fire and domestic) must be installed with the tees and valves specified on the plans.
- 2.) The stone at the turf area between the buildings is to be 6-inches of GABC.
- 3.) E5/A-501, and Section 323120.
- 4.) See Sheet C-230 Site Fire Marshal Plan included in Addendum No. 6.
- 5.) The roof drains are internal to the building and connect to the storm pipes shown on the Civil plans. There are no external downspouts that connect to a roof drain system.
- 6.) Contract A-02 Sitework is responsible for removing and/or relocating any light poles shown on the Civil drawings. Contract A-30 Electrical is responsible for any new light poles shown on the Civil drawings or ME-171.
- 7.) Sitework Scope item 41 is to be deleted. See changes to scope of work included in this addendum.
- 8.) Sitework Scope Item 49 is to be deleted. Sitework contractor is to provide temporary source of water for other trades to utilize as described in Scope item 24.
- 9.) Sitework contractor is to maintain and compact access roads to permit all contractors continued access to the site. Repairs required due to excess wear due to extreme weather conditions will be reviewed on a case by case basis and costs covered by the sitework allowance. Sitework contractor is to maintain all access roads and crane pads including those listed in Scope items 25 and 26 along with the temporary entrance, SCE, and construction laydown area shown on the Sediment and Stormwater Control Plans.
- 10.)Yes. Contract A-02 Sitework is responsible for ALL landscaping onsite.
- 11.) There is no sod in this project. This scope item will be deleted.
- 12.)Contractor is to provide as-builts deemed acceptable by the governing agencies (New Castle County and DNREC). It is this contractor's responsibility to coordinate these requirements with those governing agencies.

Response By: _	EDiS Company	Date:	27 April 2020
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TO: EDIS COMPANY, ABHA	PRE-BID RFI#:068
FROM: ANDREW HICKEY, EDIS COME	PANY DATE: 20 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCH	OOL
DWG. # / DETAIL:SPEC. SECTION	S:PAGE:
REQUEST:	
Submitted By: Pottsgrove Glass	Date: 20 April 2020

- 1.) Spec 084123 only lists (1) acceptable manufacture (Technical Glass Products). Please verify that Safti-First GXP series is an acceptable equivalent for the fire rated windows SF-10 (Qty 6), SF-10F (Qty 5) and SF-19 (Qty 1). Safti-First is listed as an acceptable glass manufacture in 088000.
- 2.) Spec 085674 calls for an acoustic rated aluminum window to meet STC-35 for VP4, VP5 & VP6. Spec lists Mon-Ray, Peerless and Wausau as acceptable manufactures. Please verify EFCO can be an acceptable equivalent with their series 3500 sliding / 3900 fixed window to meet STC-35 per spec.
- 3.) A-11 Scope of Work item #3, please verify there are no automatic door systems. Any automatic operators are supplied by contract A-10.
- 4.) A-11 Scope of Work item #6, please verify there are no translucent wall assemblies. None are located, and no spec is provided.
- 5.) A-11 Scope of Work item #10, says to provide ALL glass and glazing at interior/exterior. Please verify 101101 display case glass is not included+E298 in this (supplied by A-06 Carpentry, scope item #20).
- 6.) A-11 Scope of Work item #24 says to provide BIM services as detailed in 013700 & the bid form lists a break-out cost for BIM. Spec 013700 cannot be located. Please verify if BIM services are required for contract A-11 Glass & Glazing.
- 7.) Please verify if EXTERIOR and/or INTERIOR caulking of Aluminum Storefront Windows at PERIMETERS to building structure is to be supplied by A-11 Glazing.
- 8.) Architectural pages A-601 & A-602 lists MANY wood/hm doors getting glazing type 6 (20-min fire rated). However MOST of these doors/frames showing glass type 6 does not list any fire ratings. Please verify that doors/frames scheduled to received glazing type 6, should receive glazing type 3 if there are no fire ratings scheduled.



9.) Architectural page A-602, all glass doors 201C & 201D call for glazing type 3 (1/4" clear tempered), but spec 084126 calls for 1/2" clear tempered. We will include the 1/2" glazing per spec 084126.

- 1.) A 2-1/2" frame face dimension is acceptable. Safti-First is an approved manufacturer, see Addendum #6.
- 2.) EFCO 3500/3900 is acceptable. Also acceptable are YKK YSW 400-T sliding window, and Kawneer 8400TL.
- 3.) There are no automatic operators on this project.
- 4.) Frosted glass is specified at the gymnasium. There are no translucent wall panels. This scope item will be revised
- 5.) The glass for the display cases specified in Section 101101 is part of the display case system. Contract A-06 Carpentry & General Work is responsible for the display
- 6.) The requirement for BIM was deleted in Addendum No.4
- 7.) Contract A-11 Glass and Glazing is responsible for caulking the interior and exterior of all windows and curtainwall systems furnishing under their contract.
- 8.) Type 6 glass is correct; 20-minute glass must be provided at openings in smoke partitions, which are indicated on the life safety plans G-111 and G-112.
- 9.) 1/2" glass is correct.

Response By:	EDiS Company / ABHA	Date:	27 April 2020	
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#:069
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 20 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	<del>-</del>
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: RC Fabricators	Date: <u>20 April 2020</u>
<ol> <li>A-05 SOW Item 10. Roof Screens, supports a Screen/Grillage out to another trade. (Maybe scopes?) Steel contractor would still own all structural plans.</li> <li>A-05 SOW Item 11. Louvers and grilles - Con another trade (Maybe mechanical trade or as</li> </ol>	e in the general trades or specialty finish structural steel support as shown on uld we move this entire scope item into
RESPONSE:	
<ol> <li>There are no roof screens. This scope item w</li> <li>There are no architectural louvers. The mech Contract A-05 scope item 11 will be deleted.</li> </ol>	nanical louvers are specified in Div. 23.
Response By: EDiS Company	Date: <u>24 April 2020</u>



TO: EDIS CO	OMPANY / ABHA	PRE-BID RFI#:070
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>20 APRIL 2020</u>
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETA	IL:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Peninsula Acoustical	Date: <u>20 April 2020</u>
1.) Please j	provide missing tags for business #224.	
RESPONSE:		
1.) Wall ta	gs are provided on A-121.	
Response By:	ABHA	Date: <u>22 April 2020</u>



ГО: EDIS COMPANY / ABHA	PRE-BID RFI#:071
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>20 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Conventional Builders	Date: 20 April 2020
<ol> <li>Drawing I-115 calls for WPM-1, will this be at shown on drawing I-115? Also this is not called</li> <li>Can all areas that require WPM material be gited</li> <li>Can details for the risers showing the WPM material</li> </ol>	ed out on drawing I-001, please advise.
RESPONSE:	
<ol> <li>Delete WPM-1 at fixed seating. See revised sh</li> <li>Refer to casework elevations for wall protection. Learning Stair elevations for extent of wall protection.</li> <li>WPM material in auditorium has been deleted sheet I-115 included in Addendum #5.</li> </ol>	on material in classrooms. Refer to otection at Learning Stair.
Response By: <u>ABHA</u>	Date: <u>22 April 2020</u>



TO: EDIS COMPANY / ABI	-IA	PRE-BID RFI#:	073
FROM: ANDREW HIC	KEY, EDIS COMPANY	DATE: 20 APRIL	<u>2020</u>
PROJECT: <u>EVERETT MEREDIT</u>	TH MIDDLE SCHOOL		
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: M. Cramer &	z Associates	Date: <u>20 A</u>	pril 2020

- 1.) Contract A-21: Theatrical Audio/Visual Equipment: Network switch provide model number
- 2.) Contract A-21: Theatrical Audio/Visual Equipment: Projector provide make and model number
- 3.) Contract A-21: Theatrical Audio/Visual Equipment: Wireless transmitters provide quantity required, make and model number
- 4.) Contract A-21: Theatrical Audio/Visual Equipment: Assistive listening system receivers provide make, model numbers, quantity required and accessories required
- 5.) Contract A-21: Theatrical Audio/Visual Equipment: ClearCom belt packs provide make, model numbers, quantity required and accessories required
- 6.) Contract A-21: Theatrical Audio/Visual Equipment: Loose cables provide schedule of cable types, lengths, connectors, etc.
- 7.) Contract A-21: Theatrical Audio/Visual Equipment: Spec section 1.04.C.5 (page 4) calls for loudspeaker array rigging by Theatrical Equipment Contactor but this work is not indicated in Section 116133 Rigging Systems and Draperies. Which section is responsible for this work?
- 8.) Contract A-30: Electrical: Sections 260961, 269063, 262861 and 266010 are not listed in Summary of Work section of this contact. See page 011100-88. Are these four sections included in this bid package?

### **RESPONSE:**

1.) Provide HP 2530 series network switches for Group K #15 & 16. See Addendum #6.



- 2.) See 274117 Addendum #6 dated 4/27/2020.
- 3.) See 274117 Addendum #6 dated 4/27/2020.
- 4.) See 274117 Addendum #6 dated 4/27/2020.
- 5.) See 274117 Addendum #6 dated 4/27/2020.
- 6.) As Required. The site conditions (conduit paths, vertical chases, etc.) will determine required lengths of all bulk cable types. Pre-Made Cables As Required to complete interconnect as shown in the drawings.
- 7.) Provide rigging of loudspeaker assemblies in 274117. See Addendum #6.
- 8.) Specification Sections 260961, 269063, 262861 and 266010 are the responsibility of Contract A-30: Electrical. See changes to the summary of work included in this addendum.

Response By:	EDiS Company / ABHA	Date: <u>27 April 2020</u>
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TO: EDIS CC	OMPANY / ABHA	PRE-BID RFI#: 074	
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: 20 APRIL 202	0
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHOOL		
DWG. # / DETAI	IL:SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By:	Old World Tileworks	Date: 20 April 2020	

- 1.) Please reference spec section 093000. The manufacture for PWT-1 has informed us that their matching 3x24 Bullnose is only available in a polished finish, not unpolished like specified. They do however have a 3x12 matching Bullnose trim in an unpolished finish. Can you clarify whether you would like to use the 3x12 Unpolished Bullnose or the 3x24 Polished Bullnose? Please note that the field tile PWT-1 is unpolished.
- 2.) Please reference spec section 093000. Can you confirm that the only three approved thinset for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Pro-Lite Premium LHT Mortar
  - b. Custom Building Products MegaLite Crack Prevention Mortar
  - c. Mapei Ultraflex 3
- 3.) Please reference spec section 093000. Can you confirm that the only two approved grouts for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Prism Color Consistent Grout
  - b. Mapei Ultracolor Plus FA (Mapei Ultracolor Plus has been replaced with Ultracolor FA)
- 4.) Please see the attached drawing. Is this highlighted lobby area Terrazzo or Rubber? Finish plan and finish schedule are contradictory.
- 5.) Please see the attached drawing. Is this highlighted landing area Terrazzo or VCT for Alternate 1? It appears to be VCT on the base bid, but the finish schedule and the finish plan are contradictory and the alternate is not mentioned.
- 6.) Due to the size and complexity of the ceramic tile and terrazzo package can there be the following requirements added to Contact 16 and 17 Scope of Work section, Specification section 093000 under section 1.07 C. Installer Qualifications, and any other pertinent areas of the project documents that all eligible bidders must meet the



following requirements at the time of the bid: A.) The use of in-house employees for installation labor is mandatory, subcontracting any portion of the labor is strictly prohibited. B) Eligible bidder's employees must be comprised of Ceramic Tile Education Foundation Certified Tile Installers. C.) Eligible bidders must have a Department of Labor approved craft training or apprenticeship program. These stipulations will ensure the State of Delaware and Appoquainamink School District get the quality, craftsmanship and necessary man-power needed to properly perform this project. All of these stipulations are part of the State of De Procurement Code and should be specified and enforced.

- 1.) Provide the 3x12 Bullnose trim in the unpolished finish.
- 2.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.
- 3.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.
- 4.) See updated finish schedule on I-601 included in Addendum #5 clarifying TRF-1 to be installed in lobby area of Stair 199A.
- 5.) See updated finish schedule on I-601 included in Addendum #5 clarifying VCT-1 to be installed in lobby area of Stair 299A.TRF-1 to be installed for Alternate 1.
- 6.) No. The Instruction to Bidders notifies all bidders that they are required to follow the current Title 29 bid laws. We will not duplicate these DE Code in the bid documents. The DE bid laws are being enforced.

Response By:	EDiS Company / ABHA	Date:	22 April 2020	
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TO: EDIS COMPANY / AI	ВНА	PRE-BID RFI#:075
FROM: ANDREW HI	CKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MERED	OITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: Cavan Cor	nstruction	Date: 21 April 2020

- 1.) The learning Stairs, on A-406 B1 & A1 is showing terrazzo stairs. In the concrete scope you have listed the 3/4 & 7/16" cement board to be installed by the concrete sub? The system requirement should be part of the terrazzo installation. I can already see the finger pointing. #10 in scope
- 2.) #21 supply all sleeves for all in coming utilities! and install, Installing is not a problem thru a concrete wall or under the footing. This should be furnished to the concrete sub. (Sleeves)
- 3.) Caulking of joints? Again this is done by someone else.
- 4.) Perimeter foundation drains are in the Concrete scope of work. Where are they shown on the drawings?
- 5.) Dewatering during the mason's and waterproofing. Once the footing is installed the mason should take over.
- 6.) Bim for our work only? or the complete job?

- 1.) Scope item no. 10 was deleted from Contract A-03 Concrete in Addendum No. 4
- 2.) The sleeves will be furnished by the contractor providing the utility. This scope item will be revised.
- 3.) Each contractor is responsible for caulk or sealant associated with their own work. If there is caulk or sealant shown in concrete, either on the structural or architectural drawings, then Contract A-03 Concrete is responsible for this work and should be included in your bid.
- 4.) This scope item is being deleted in Addendum No. 6



- 5.) The responsibility for dewatering the foundation excavations from excavation until acceptance by the masonry contractor and the start of CMU foundation wall installation is the responsibility of the concrete contractor. The masonry contractor will provide dewatering from the start of masonry foundation wall installation to completion of the masonry foundation walls in an area. The roofing contractor will be responsible for dewatering from the start of their waterproofing installation to completion at which time the responsibility for dewatering returns to the concrete contractor through backfilling. Each trade (concrete, masonry, roofing) is responsible for cleaning mud/debris/etc. on existing installations to install their work.
- 6.) The requirement for Contract A-02 to provide BIM was deleted in Addendum No. 2

Response By:	EDiS Company / ABHA	Date:	27 April 2020	
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TO: EDIS C	OMPANY / ABHA	PRE-BID RFI#:076_
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>21 APRIL 2020</u>
PROJECT: <u>EVE</u>	ERETT MEREDITH MIDDLE SCHOOL	_
DWG. # / DETA	AIL:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Old World Tileworks	Date: 21 April 2020

- 1.) Please reference spec section 093000. The manufacture for PWT-1 has informed us that their matching 3x24 Bullnose is only available in a polished finish, not unpolished like specified. They do however have a 3x12 matching Bullnose trim in an unpolished finish. Can you clarify whether you would like to use the 3x12 Unpolished Bullnose or the 3x24 Polished Bullnose? Please note that the field tile PWT-1 is unpolished.
- 2.) Please reference spec section 093000. Can you confirm that the only three approved thinset for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Pro-Lite Premium LHT Mortar
  - b. Custom Building Products MegaLite Crack Prevention Mortar
  - c. Mapei Ultraflex 3
- 3.) Please reference spec section 093000. Can you confirm that the only two approved grouts for contract A-16 and A-17 are as follows?
  - a. Custom Building Products Prism Color Consistent Grout
  - b. Mapei Ultracolor Plus FA (Mapei Ultracolor Plus has been replaced with Ultracolor FA)

- 1.) Provide the 3x12 Bullnose trim in the unpolished finish.
- 2.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.
- 3.) Confirmed. For substitution procedures: See Section 016000 Product Requirements.



Response By: _	Scott Lester, ABHA	Date:	22 April 2020	
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#:077_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Assurance Media	Date: 21 April 2020

- 1.) Outlet with No Designation: Each outlet type in the Communications Outlet Configuration on Drawing E501 shows each outlet having a specific letter designation to then identify what cabling to be installed at that outlet location. Work Rooms: 110, 102E, 210, and 230 all show an outlet, but no letter designation clarifying the type of outlet. Please clarify.
- 2.) Outlet with No Designation: Caft. 146 has an outlet on the side near the MDF that does not have a letter designation. Please clarify.
- 3.) Outlet with No Designation: Learning Commons: 100D, 100H, 200D, 201H each of these spaces show 4 table groups with an outlet in the center of each table group, but no letter designation identifying the type of outlet. Please clarify.
- 4.) Outlet with No Designation: Work Rooms: 144 and 201B have no outlets shown in them. Are there to be any outlets in either of these rooms?
- 5.) D type outlet with no correlating A type outlet: Rooms 102A, 122, 145: These Rooms are not classrooms but in office / administrative areas... There are "D" outlets shown, but no "A" outlets in the same room. By the Communications Outlet Configuration detail on the drawings there is to be a 3.5mm audio connection between the D and A outlets. Unless otherwise informed the 3.5mm audio connection will be eliminated in these areas as there is no A outlet shown. Are there to be any other outlets in these rooms? Possibly a floor outlet under the tables?
- 6.) Wireless Access Points: It appears as though the Auditorium, stage, and mechanical spaces behind the stage area do not show designations for WAPs. Are there to be any in these spaces/areas?
- 7.) CONTRACT NO. A-31 STRUCTURED CABLE Summary / Scope of Work Excerpts:



- a. 9. Structured Cable Contractor will install all network cable within the kitchen and kitchen hoodidentified on the Kitchen Equipment Drawings K-104, K-501, K-502, K-503, K-504. Final location of network drops to be coordinated with the documents, the Kitchen Equipment Contractor, and the Construction Manager prior to installation.
- b. 10. Structured Cable Contractor will install communication wiring from the food managementsystems to the POS devices, menu display boards, and temperature monitoring systems, including terminations on both ends. Final location of the food management systems to be coordinated with the documents and the Construction Manager prior to installation.
  - i. I do not see any designations or network outlets identified on the Kitchen Equipment Drawings K-104, K-501, K-502, K-503, K-504. Please indicate where in the Kitchen the network outlet for the Kitchen hood, and temperature monitoring systems are to be. I do see the "E" outlets on the power drawings showing what I believe is coverage for the POS units and menu board displays in the dining area.

- 1.) They are to be type (E)
- 2.) Type (E)
- 3.) Floor boxes have been deleted and receptacles relocated to walls. See Addendum #6.
- 4.) Add 2(E) centered above the counter for each room.
- 5.) change to type (E)
- 6.) Add 4(B) on each side of the auditorium for WAPS
- 7.) On drawing K-104 there is a Cat 6 wire from each cooler/frezzer box to the office. On drawing K-505, control panel ladder diagram, there is a cat 6 jumper from the control panel to the switches.

Response By: _	EDiS Company / ABHA	Date:	27 April 2020	
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TO: <u>SETH H.</u>	AMMONDS,	ABHA	PR	E-BID RFI#:	078
FROM:	andrew hi	CKEY, EDIS COMPANY	<u>(</u>	DATE: <u>21 AP</u>	RIL 2020
PROJECT: <u>EVE</u>	<u>RETT MERED</u>	ITH MIDDLE SCHOOL	_		
DWG. # / DETAI	L:	SPEC. SECTIONS:	126113	PAGE:	
REQUEST:					
Submitted By:	Davis Furn	iture Company	D	ate: 21 April	2020

- 1.) I would like to submit a Substitution Request for Section 126113 Fixed Audience Seating for the Everett Meredith Middle School located in Middletown, DE.
  - a. Attached please find the completed substitution request form, annotated substitution specification/comparison sheet, Davis Furniture Co. information, Convention Seat Specification, our base fabric selections, a list of completed projects, a sample of our warranty sheet and our ANSI/BIFMA testing results.
  - b. If you review the features of the chairs themselves, you would find that the construction is superior to our competition.
  - c. The biggest difference in our chairs versus our competition is that we offer a gravity lift (counterweight) seat rising mechanism, as opposed to the tension spring seat rising mechanism of old. As you may know, the way a tension spring mechanism works is the spring connected to the seat is put on to a small shaft on either or both sides of the seat. When a person sits on the seat, their weight stretches the spring out, creating tension. When they get up, the tension is released and the seat returns to its "up" position. These springs are lubricated with grease from the factory to allow for proper and quieter initial operation. After use, the grease wears off or gets dirty and the springs lose their tension from being stretched time and time again, which in turn, means the springs require additional lubrication and eventual replacement over time. Our gravity lift mechanism is simple and fail safe. This seat rising mechanism is quiet, maintenance free and cannot fail over time.
  - d. The seat also has a 5/8" diameter solid steel rod that runs all the way through the seat from one support to the next, creating greater stability. This rod is run through two self-lubricating nylon bearings which are held in place by the up and down stops for the seat mechanism. The rod itself has two stops



- welded on it to control when the seat stops. Additionally, these stops are nearly silent as they are outfitted with neoprene bumpers to dampen any noise.
- e. I will let you know that based on published specifications, we use more and a better quality foam and in almost all cases, equal or thicker steel on all seating components.

RESPONSE:			
1.) Substitution is no	ot approved.		
Response By:	Scott Lester, ABHA	_Date:	27 April 2020



TO: EDIS COMPA	NY	PRE-BID RFI#: 079
FROM: AND	REW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: <u>EVERETT</u>	MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: <u>Bri</u>	ghtfields	Date: <u>21 April 2020</u>

- 1.) Please answer the questions stated EDiS would ask in Addendum 1 under Section 1.4.2 (a to f)
- 2.) Any liquidated damages?
- 3.) The bid forms are not dated correctly, please clarify if the 21 February bid forms are to be used?
- 4.) Is there an allowance for owner's use in the demolition contract?
- 5.) Please clarify what contract is required to handle the utility disconnects?
- 6.) Please clarify what contract is to handle refrigerant recovery?
- 7.) Which contract is responsible to remove universal waste (light bulbs, batteries form emergency lighting) etc.?
- 8.) How will PCB ballast per handled for disposal of encountered? cost per unit?
- 9.) Based on the proposed schedule, the site work will be started at the same time as demolition, please confirm the demolition contractor will have full access for tractor trailers to drive onsite and turn around in order to remove debris form the site?
- 10.) Who obtains the local demolition permit and pays for the fee?
- 11.)Please clarify if there any required compaction testing for the backfilling of the boiler and auditorium fill areas?
- 12.) If the contract has no involvement with BIM, do I leave the bid form line as "No change" or enter \$0 ?
- 13.)On the demolition contract bid forms, if the alternates listed no longer apply, should I list these as "No change", enter \$0 or leave blank.
- 14.) Has EDiS applied for and obtained an air permit for the crushing operations or will this be the demolition contractor's responsibility?
- 15.) Who pays for the advertisement of the proposed crushing operations for the pending air permit?



- 16.) For onsite crushing, please clarify if brick can be mixed in with the concrete for use as clean fill?
- 17.) For crushing, please clarify if 3" minus is acceptable for crushed concrete?
- 18.) Will the contractor be responsible for the required air monitoring during crushing operations with reporting to DNREC on a daily basis?

- 1.) These were responded to in Addendum No. 4
- 2.) No
- 3.) Use the revised forms issued in Addendum No. 4
- 4.) Yes. See A-01 scope item no. 40.
- 5.) Contract A-30 Electrical is responsible for disconnecting and deenergizing the electrical systems. See A-30 scope item 6. Contract A-27 Plumbing is responsible for all plumbing systems. Contract A-26 Fire Protection is responsible for the fire protection system.
- 6.) Contract A-01 Demolition is responsible for refrigerant recovery. See A-01 scope item no. 10 revised in Addendum No. 2
- 7.) Contract A-01 Demolition
- 8.) According to the Environmental inspection company there are no PCB ballasts. If they are encountered notify EDiS and they will have the abatement contractor remove.
- 9.) The demolition contractor will have full access. A pre-installation meeting with all contractors involved will be held before work begins to coordinate sequence of work and access.
- 10.) The demolition permit with the Town of Middletown will be obtained and paid for by EDiS. Any permits required by DNREC or other agencies are the responsibility of the Demolition Contractor.
- 11.) See the Geotech report for compaction requirements
- 12.)BIM was deleted from the bid form in Addendum No. 4
- 13.)The Demolition Contractor has some work associated with Alternates 9, 10, & 11. A-01 scope item 10 was revised in Addendum No. 2. Scope item #40 was added to the Masonry scope in Addendum No. 2. You should enter the amount of money associated with your participation for these alternates. If this cost is \$0, enter \$0. Do not leave blank
- 14.) The Demolition Contractor will be responsible for obtaining the air quality permit, associated testing, and reporting.



- 15.) The Demolition Contractor
- 16.) We do not recommend using crushed brick as or mixed in with structural fill.
- 17.) See the response to RFI#5 issued in Addendum No.  $4\,$
- 18.) The Demolition Contractor will be responsible for obtaining the air quality permit, associated testing, and reporting.

Response By: _	EDiS Company	Date:	27 April 2020	
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TO: SETH HAM	MONDS, ABHA	PRE-BID	RFI#:081_
FROM: ANI	DREW HICKEY, EDIS COMPANY	DATE: <u>21 Ai</u>	PRIL 2020
PROJECT: EVERET	T MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL: _	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: R	alph DegliObizzi	Date: 21 April	2020
dimensions size for 100	alked to Mike Iacona of Gillespie ind	in drawing P-502 is bigger. Please let us	s not the correct
RESPONSE:			
1.) The grease drawings.	trap is to be the Gillespie 1,000 Gallo	on tank as shown or	n the civil
Response By:	Scott Lester, ABHA	Date:	27 April 2020



IO: SETH HAMMONDS, ABHA	PRE-BID RF1#:082_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: <u>EDiS Company</u>	Date: <u>21 April 2020</u>
<ol> <li>Note 10 on Sheet A-113 for Alternate 2: Maso section A1/A-323. The drawing showing the A5/A-323 is a wall section for the mechanical correct wall section to be utilized when pricin</li> <li>Wall section A2/A-322 (cafeteria wall at the condetail A4/A-513. That detail requires waterprical wall. The detail for the continuation of this waterproofing at the inside face of the waterproofing required only at the curtainway waterproofing start/stop along this cafeteria was section A2/A-323 is a wall section for the mechanical correct wall section to be utilized when pricing at the curtain waterproofing at the inside face of the waterproofing start/stop along this cafeteria wall section A1/A-323 is a wall section for the mechanical correct wall sec</li></ol>	fence calls out Wall Section A5/A-323. area. Please confirm that this is the ng Alternate 2. urtainwalls) calls out the foundation coofing at both sides of the foundation vall outside of the curtainwalls does not be foundation wall. Is this interior alls as shown? If so, where does the
RESPONSE:	
<ol> <li>A5/A-323 is the correct section for the mason to the mechanical yard screen wall in section.</li> <li>Waterproofing is not required on the interior</li> </ol>	
Response By: Scott Lester, ABHA	Date:27 April 2020



TO: SETH HAMN	MONDS, ABHA		PRE-BID RFI#:	083
FROM: AND	REW HICKEY, EDIS COMPANY	DA	TE: <u>21 APRIL 2020</u>	!
PROJECT: EVERETT	MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:	SPEC. SECTIONS:	P	AGE:	
REQUEST:				
Submitted By: Da	altile	Date: _	21 April 2020	
,	n request contract A-16PWT-1: Fety Civic Sand S046 as a proposed project.			
RESPONSE:				
1.) Approved				
Response By:	Scott Lester, ABHA	Date:	22 April 2020	



TO: <u>EI</u>	DIS COMPANY, ABHA	PRE-BID RFI#:	084_
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020	
PROJECT:	EVERETT MEREDITH MIDDLE SCHOOL		
DWG. # / I	DETAIL:SPEC. SECTIONS:	PAGE:	
REQUEST	? <del>:</del>		
Submitted	By: Nickle Electric	Date: <u>21 April 2020</u>	
pa th pr lo. 2.) Ad pa sc 3.) Pl	CS-101S which is feed from panel PB and Canel PB-102IG that are shown on single line at are located on power drawing E-135? If rovide what type is to be used. Please confined side of CS-xxxx disconnects shown in an addendum #4 provided panel schedules for anels are not located on the single line draw hedules mislabeled or are the panels on the ease confirm that the EC is not responsible es.  ease provide location of distribution panel	e drawing E-502, the disconnect they are disconnect switches ple rm that the EC is not responsible uditorium on drawing E-135. panels PB-103S and PB-104S, buying E-502. Are the Addendum e single line mislabeled?	switches ease le for at these panel
RESPONS	GE:		
re 2.) Re 3.) U	ompany Switch disconnects are to be used sponsible for circuiting/installing company efer to Addendum #6. tility fees will be paid for by the owner. ee Addendum No. 4	, , , , ,	
Response l	By:EDiS Company, ABHA	Date:27 April 2	.020



TO: EDIS COMPANY	PRE-BID RFI#:085
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: H.K. Griffith	Date: 21 April 2020

- 1.) Re: Scope of work for Contract A-08 Roofing, item #12. What existing roofs are scheduled for temporary patch work and where can this be found in the documents? What existing roofs are scheduled to be re-roofed? If this cannot be quantified can an allowance be provided?
- 2.) Re: Scope of work for Contract A-08 Roofing, item #16. Roof curbs are typically provided by the mechanical contractor as they are familiar with the dimensions, design and loads of the equipment they are providing. Can this be removed from the roofing scope and added to the mechanical scope?
- 3.) Re: Scope of work for Contract A-08 Roofing, item #19. What existing roofs are scheduled for permanent patching and where can this be found in the documents? If this cannot be quantified can an allowance be provided?
- 4.) Re: Scope of work for Contract A-08 Roofing, item #20. Where are the skylights located and is there a specification?
- 5.) Section 075300 Membrane Roofing Item 3.07 & 3.08 Cleaning & Protection It is not feasible to protect the entire roof from every single contractor, especially a project of this size. We would recommend that the trades working on the roof provide their own roof protection. Or can an allowance be provided to carry in our bid to for roof protection.
- 6.) The coping above the metal wall panels is an integral part of the metal wall panel system and should be provided by the metal wall panel contractor. This will also assure that the color of the panels matches the coping. Please clarify.
- 7.) Which scope of works owns the spray foam & intumescent coating behind the metal wall panels?
- 8.) Which scope of work owns the self-adhered membrane flashings on drawings A-512, details A3 & A4 from the CMU to the underside of the blocking?



- 1.) There are no existing roofs. This scope item is to be deleted. See revisions to the scope of work included in Addendum #6.
- 2.) Roofing Scope Item 16 was revised in Addendum #5.
- 3.) There are no existing roofs. See revisions to the scope of work included in Addendum #6.
- 4.) There are no new skylights. This scope item is to be deleted. See revisions to the scope of work included in Addendum #6.
- 5.) Each contractor is responsible for protecting adjacent materials during their work, so roof protection will be provided by the trade performing the work over the new roof. Final cleaning of the roof is the roofing contractor's responsibility as required by the specification.
- 6.) Copings at the top of metal wall panels are to be provided by Contract A-09: Metal Wall Panels to match the wall panel color selected. All other copings throughout the school are to be provided by the roofing contractor. Color to be selected from manufacturer's standard selections.
- 7.) Contract A-04: Masonry is to provide all spray foam insulation and associated intumescent coating throughout the project no matter the finish material on top.
- 8.) Self-adhered membrane flashing from the CMU to blocking is to be provided by Contract A-04: Masonry as part of the spray foam insulation installation.

Response By:	EDiS Company	Date:	27 April 2020
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TO: EDIS COMPANY / ABHA	PRE-BID RFI#:086_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>21 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Miller Flooring Company	Date: <u>21 April 2020</u>

- 1.) Please confirm the salvaged wood flooring being used on the project is being salvaged by the A-01 Demolition contractor and installed on the project by the A-12 Casework & Millwork contractor.
- 2.) The Finish Legend I-001 lists the WDF-1 & WDF-2 for the gym Wood Flooring lists the wood flooring as Basis of Design Aacer with the Products being listed as Scissor Loc or Robbins Air Channel Star (these are not equal systems) and Specification 096566 lists the floor system for the Gym wood flooring as basis of design Bio-Channel Star which is a different system than both of the floor systems listed in the finish legend. Please confirm the wood floor system to be used for wood gym floor.
- 3.) Please confirm the scheduled finish floor to be used for the Stage Floor is ¼" nominal S2S oil Hardboard, I-001 room finish legend calls for Marlite.
- 4.) Is the Millwork Prime contractor responsible for the Stage Front Edge stain grade wood trim nosing and fascia trim indicated on drawing A-631 detail A-2?
- 5.) In the scope of work for Contract A-19 Wood and Athletic Flooring item #3 for the underfloor ventilation system this is not listed in the specifications and is not required by the manufacturer for the floor systems indicated. Should this system not be provided?
- 6.) In the scope of work for Contract A-19 Wood and Athletic Flooring item #4 it lists room studio theater and practice rooms. The only area we see the hardboard floor being used on project is on the stage. Can you clarify if these floors are being used in areas other than the stage floor?
- 7.) In the scope of work for Contract A-19 Wood and Athletic Flooring, Technical Specification Sections, it lists Section 090561. We have some questions regarding this Specification Section as listed below:



- a. In the scope of work for Contract A-19 Wood and Athletic Flooring, 1.01 Section Includes, it does not list wood flooring. The Specification 096429 Wood Strip Flooring does not cross reference Section 090561 either. Specification 096566 Resilient Athletic Flooring does list Specification 090561 as a related section. Is this scope item listed in the Contract no. A19 Scope in reference to Section 096566 Resilient Athletic Flooring only?
- 8.) In the scope of work for Contract A-19 Wood and Athletic Flooring, Technical Specification Sections, it lists Section 090561. We have some questions regarding this Specification Section as listed below:
  - a. This section lists remedies if the concrete fails moisture testing and indicated to not add this cost to your base bid. There is no place for us to put an Additional cost if it is required after testing the floor and the concrete fails the moisture testing. Should this be added as a add Unit Cost (there is no place on bid form to enter unit cost) if needed or should we carry this cost in our base bid?
- 9.) In the scope of work for Contract A-19 Wood and Athletic Flooring, Technical Specification Sections, it lists Section 090561. We have some questions regarding this Specification Section as listed below:
  - a. If this Section 090561 does apply to the wood flooring The Schonox SDG system is not recommended for the wood flooring because the systems specified require them to be pinned to the concrete with fasteners. Should we use the wood floor manufactures recommended sheet vapor barrier for concrete that fails the moisture testing instead? And what tolerance of Relative Humidity (RH) should it be good up to? Also should this be carried as a unit cost to be added to the contract if it is needed instead of carried in base bid cost?

- 1.) Existing wood flooring is to be salvaged by the demolition contractor and turned over to Contract A-06: Carpentry for installation as new wood platforms. See additional scope items added in this addendum.
- 2.) Refer to revised sheets I-001 and I-601 included in Addendum #5 clarifying floor types to coordinate with Specification Section 096429 Wood Strip Flooring.
- 3.) Refer to revised sheets I-001 and I-601 included in Addendum #5 clarifying floor types to coordinate with Specification Section 096429 Wood Strip Flooring.
- 4.) Confirmed. Contract A-12: Casework & Millwork is to provide stain grade wood trim nosing, fascia, and base along with p-lam façade at the stage front.



- 5.) Scope Item No. 3 is deleted. See changes to the scope of work included in Addendum No. 6.
- 6.) Correct, Studio Theater and Practice rooms do not contain wood floors. See changes to the scope of work included in Addendum No. 6.
- 7.) Section 090561 applies to all flooring related sections including wood strip flooring and resilient athletic flooring.
- 8.) Contractor is to provide moisture tests as indicated and present results to construction manager. Dehumidification or other remediation of moisture in the slab will be provided by the construction manager. Wood flooring contractor is to provide an initial moisture reading and weekly updates until the required moisture reading is achieved.
- 9.) Sheet vapor barrier is specified in 09 6429 Wood Strip Flooring. RH requirements are manufacturer-dependent and the manufacturer's requirement for RH must be met prior to beginning installation.

Response By:	EDiS Company / ABHA	Date:	27 April 2020	
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TO: EDIS COMPANY		PRE-BID RFI#:087_
FROM: ANDREW	/ HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEI	REDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: <u>Mason</u>	Building Group	Date:21 April 2020
1.) A-07 - Who own	s the window mullion mate p	per A6/A-631
RESPONSE:		
1.) Contract A-07 M closures. See Ad	ž	responsible for the adjustable partition
Response By:	EDiS Company	Date: 23 April 2020



TO: EDIS COMPANY	PRE-BID RFI#:088_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Mason Building Group	Date:21 April 2020
1.) RFI A-07- Addendum #3 added structural pane A-407. I cant seem to find a A-407 drawing. Wh	
RESPONSE:	
1.) The structural concrete panels are shown on A-	-406
Response By: EDiS Company	Date:23 April 2020



TO: EDIS COMPANY / ABHA	PRE-BID RFI#:089
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Roman Mosaic	Date: 21 April 2020

- 1.) Ref. specification section 011100 Summary of Work, page 4, paragraph 6 Scope of work / General Information, item #I. Will a material hoist be provided by others for free use by the Tile Contractor?
- 2.) Ref. specification section 011100 Summary of Work, page 56, Contract No. A-16: Ceramic Tile, Item #2 Quarry Tile. We note the summary of work for this contract notes to provide Quarry tile however we find no quarry tile scheduled on this project. Are Quarry tile finishes required on this project? if so please indicate where and provide the manufacture, size, color, finish information.
- 3.) Ref. specification section 011100 Summary of Work, page 57, Contract No. A-16: Ceramic Tile, Item #16 Protection. We note the summary of work for this contract notes to provide Protection. We will base the protection of the floors on ramboard with taped seams with maintenance and removal provided by others (as it is impossible to put a price on policing the job site to maintain temporary protection after our work is complete and we are off the job) unless advised otherwise.
- 4.) Ref. specification section 011100 Summary of Work, page 57, Contract No. A-16: Ceramic Tile, Item #15 Patching and Leveling. We note the summary of work for this contract indicates to include patching and leveling. Leveling a substrate can be very expensive when you take into account doorways, etc.
  - a. Is the Ceramic Tile Contractor to include leveling floors scheduled to receive ceramic tile finishes? If so, At the time of the bid the Tile Contractors will not be able to determine the amount of leveling required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.
  - b. At the time of the bid the Tile Contractors will not be able to determine the amount of patching material required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.



- 5.) Ref. specification section 093000 Tiling, page 1, paragraph 1.01.D Section Includes. We note that cementitious backer board are included in this section, however we also note that installation of cementitious backer boards in included in 011100 Contract No. A-07: Metal Studs & Drywall. Please confirm the installation of cementitious backer boards is the responsibility of Contract No. A-07, not Contract A-16?
- 6.) Ref. specification section 093000 Tiling, page 4, paragraph 2.02A.1 Trim and Accessories. We note the specifications indicate that Schluter RONDEC stainless steel non-ceramic trim is to be used at the inside corners, outside corners and top edges of the tile. However the elevations on drawings (i.e. A-425, A-426, etc.) indicate 3"x12" bullnose trim is to be used at the top edges, detail A6/A-421 depicts a Schluter Schiene stainless steel divider strip is to be used at the tile edges.
  - a. Is the wall tile to be finished with Schluter RONDEC at the outside and top edge per the specifications or bullnose tile trim at the wall tile cap and Schluter Schiene at the outside wall tile corners per the drawings?
  - b. Is tile trim required at the inside wall tile corners or are the tiles to be butted together? If tile trim is required at the inside corners please advise the manufacturer, series and finish.
- 7.) Ref. drawing A-425, Toilet Room Elevations, Wainscot bullnose trim. The wall tile bullnose trim is depicted to be PWT-2 tile material based on the Wall Tile Pattern Legend. We will assume all bullnose trim will match the PWT-2 material unless advised otherwise
- 8.) Ref. Drawing I-001, Finish Legend and Notes, Alternates, Alternate 8, Mosaic Floor Tile MFT-1. We note the color was not selected for the mosaic floor tile. Please provide the color selection for the mosaic floor tile as this will impact the price.
- 9.) Ref. Drawing I-001, Finish Legend and Notes, Alternates, Alternate 8, Marble Threshold MT-1. We note the material and color was not indicated for the marble thresholds. Please provide the material and color selection for the mosaic floor tile as this will impact the price.
- 10.)Ref. Drawing I-001, Finish Legend and Notes, Porcelain Wall Tile, PWT-1. We note the tile surface finish was not indicated for the PWT-1 tile. This tile is available in a natural and polished finish. Please provide the finish for the PWT-1 wall tile as this will impact the price.
- 11.)Ref. Drawing I-001, Finish Legend and Notes, Ceramic Wall Tile, CWT-1. We note the color and finish was not selected for the CWT-1. Please provide the color and finish for the CWT-1 wall tile as this will impact the price.
- 12.)Ref. Drawing I-001, Finish Legend and Notes, Ceramic Wall Tile, CWT-2. We note the color and finish was not selected for the CWT-2. Please provide the color and finish for the CWT-2 wall tile as this will impact the price.



13.)Ref. drawing I-601, Finish Schedule, Custodian rooms 217 and 239. We note the finish keynotes on Custodian 217 and 239 refer to finish schedule keynote #20 for wall tile pattern at EWC locations. Are wall tile finishes required in these or any other Custodian rooms? If so, where?

- 1.) No. Each contractor is responsible for their own material handling
- 2.) There will be no quarry tile installed in this project.
- 3.) This is acceptable.
- 4.) Patching and leveling will be taken out of contract allowance. See changes to the scope included in Addendum No. 6.
- 5.) Confirmed.
- 6.) PWT-5 at the Learning Stair (reference A4/I-401 incldued in Addendum #5) is to be finished with the Schluter RONDEC profile at top edges of the tile. Schluter Schiene is to be provided at the oustide wall tile corners per the drawings. All other wall tiles to have coordinating porcelain/ceramic trim.
  - a. Provide Schluter Schient stainless steel divider strip at outside corners per A6/A-421. Tile trim is not required at the inside wall tile corners.
- 7.) All bullnose trim at PWT-2 locations to match PWT-2.
- 8.) MFT-1 to be selected from Group 2 options. Refer to updated sheet I-001 included in Addendum #5.
- 9.) Marble Threshold color to be Carrara White Marble. Refer to updated sheet I-001 included in Addendum #5.
- 10.)PWT-1 to be unpolished finish. Refer to updated sheet I-001 included in Addendum #5.
- 11.)Color of CWT-1 to be selected from Group 2 options. Refer to updated sheet I-001 included in Addendum #5.
- 12.)Color of CWT-2 to be selected from Group 2 options. Refer to updated sheet I-001 included in Addendum #5.
- 13.) Wall tile finishes are not required in Custodian rooms 217 and 239. Refer to updated sheet I-601 included in Addendum #5 with note 20 deleted from Custodian rooms 217 and 239.

Response By:	EDiS Company / ABHA	Date: <u>27 April 2020</u>	
1 ,	* *		



TO: EDIS COMPANY / ABHA	PRE-BID RFI#: 090
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 21 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Roman Mosaic	Date: _ 21 April 2020

- 1.) Ref. specification section 011100 Summary of Work, page 4, paragraph 6 Scope of work / General Information, item #I. Will a material hoist be provided by others for free use by the Terrazzo Tile Contractor?
- 2.) Ref. specification section 011100 Summary of Work, page 58, Contract No. A-17: Terrazzo Tile, Item #2 Mock-ups. The summary of work for this contract indicates to provide a mock up as required by plans and specifications. We find no mock up indicated in specification sections 096616 and 096633. Is a mock up (to remain as part of finished work) required for the Terrazzo Tile scope?
- 3.) Ref. specification section 011100 Summary of Work, page 58, Contract No. A-17: Terrazzo Tile, Item #6 Protection. We note the summary of work for this contract notes to provide Protection.
  - a. We will base the protection of the floors on ramboard with taped seams with maintenance and removal provided by others (as it is impossible to put a price on policing the job site to maintain temporary protection after our work is complete and we are off the job) unless advised otherwise.
  - b. Roman Mosaic and Tile Company always excludes protection of stairways due to safety concerns. We will assume no protection of the stairs will be required unless advised otherwise.
- 4.) Ref. specification section 011100 Summary of Work, page 58, Contract No. A-17: Terrazzo Tile, Item #5 Patching and Leveling. We note the summary of work for this contract indicates to include patching and leveling. Leveling a substrate can be very expensive when you take into account doorways, etc.
  - a. Is the Terrazzo Tile Contractor to include leveling floors scheduled to receive terrazzo tile finishes? If so, At the time of the bid the Tile Contractors will not



- be able to determine the amount of leveling required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.
- b. At the time of the bid the Terrazzo Tile Contractors will not be able to determine the amount of patching material required to provide accurate and comparable pricing. We recommend assigning an allowance for leveling.
- 5.) Ref. Specification section 096633 Cement Terrazzo Tiles, page 2, paragraph 2.03E Finish/Texture. We note the specification indicates the terrazzo tiles are to have a polished or honed finish. Since the finish may have an effect on the material price please advise if the tiles are to be priced with a polished or honed finish.
- 6.) Ref. Specification section 096633 Cement Terrazzo Tiles, page 3, paragraph 3.01A Installation. We note the specification refers to section 093000 Tiling for tile installation. We will assume the Terrazzo floor tiles will be installed using thin set unless advised otherwise.
- 7.) Ref. drawing I-001 Finish Legend and Notes, Terrazzo Tile Floor. We note that the finish schedule indicates that the size for TRF-1, TRF-2 and TRF-3 is noted to be "TBD". However specification 096633 Cement Terrazzo Tiles, page 2, paragraph 2.03A indicates the terrazzo tiles are to be 11 13/16" x 11 13/16". We will assume the terrazzo tile size is as noted in specification section 096633 unless advised otherwise.
- 8.) Ref. drawing I-001, Finish Legend and Notes, Stair Coverings, Terrazzo Tread TTR-1. We note the Product and Color was not selected for the Terrazzo Treads. Please provide the product and color for the stair treads as this will impact the price.
- 9.) Ref. drawing I-001, Finish Legend and Notes, Stair Coverings, Terrazzo Riser TRIS-1. We note the Product and Color was not selected for the Terrazzo Risers. Please provide the product and color for the stair risers as this will impact the price.
- 10.)Ref. drawing I-001, Finish Legend and Notes, Finish Legend. We note the Finish Legend includes TRB Terrazzo Tile Base however we find no terrazzo tile base scheduled on this project. We will assume there is no Terrazzo Tile Base required unless advised otherwise.
- 11.)Ref. drawing I-601, Finish Schedule, Stair A. We note the finishes schedule indicate RST-1/RR-1 finishes on the stair however drawing I-111 First Floor Finish Plan Area A depicts for TRF-1 floor finishes on the 1st floor. Are TRF-1 floor finishes required in the base bid at the 1st floor of Stair A as depicted on drawing I-111?
- 12.)Ref. drawing I-601, Finish Schedule, Vestibules 100L and 100N. We note the finishes schedule indicate WCT-1/TRF-1 finishes are required in these vestibules however the adjacent Corridor 100M is scheduled for QT-1, 2, 3 floor finishes. Are Vestibules 100L and 100N to receive TRF-1 floor finishes?



### **RESPONSE:**

- 1.) No. Each contractor is responsible for their own material handling.
- 2.) Mock-up can remain as part of the finished work.
- 3.) This is acceptable.
- 4.) Patching and leveling will be taken out of contract allowance. See changes to the scope included in Addendum No. 6.
- 5.) Terrazzo tile finish to be polished.
- 6.) Confirmed.
- 7.) Tile size is as noted in specification section 096633. Refer to updated sheet I-001 included in Addendum #5.
- 8.) Product and Color of Terrazzo Tread TTR-1 to be Product: Traditional Series; Color: Graphite. Refer to updated sheet I-001 included in Addendum #5.
- 9.) Product and Color of Terrazzo Tread TRIS-1 to be Product: Traditional Series; Color: Graphite. Refer to updated sheet I-001 included in Addendum #5.
- 10.) There is not Terrazzo Tile Base on this project.
- 11.)See updated finish schedule on I-601 included in Addendum #5 clarifying TRF-1 to be installed in lobby area of Stair 199A. TRF-1 is required in the base bid at the 1st floor of Stair A as depicted on drawing I-111.
- 12.) Provide WCT-1/TRF-1 as shown in Vestibules 100L and 100N.

Response By:	EDiS Company / ABHA	_Date: _	27 April 2020



TO: EDIS COMPANY / ABHA		PRE-BID RFI#:091
FROM:	ANDREW HICKEY, EDIS COMPANY	DATE: <u>21 APRIL 2020</u>
PROJECT: <u>EVER</u>	ETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAI	L:SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By:	Dezigns Construction	Date: 21 April 2020

- 1.) For Contract A-08 Alternate no.2 Decorative CMU screen wall will this alternate be moved to Contract A-04 as the scope of work for the CMU wall is a masonry skilled trade.
- 2.) For Contract A-08 Alternate no. 6 Lightning Protection System will this alternate be moved to Contract A-30 as the scope of work is for the Electrical Skilled trade.
- 3.) Bid Bond requirement states 10% is there a not to exceed amount for the bid bond for Contract A-08? i.e 10% not to exceed \$20k
- 4.) Contract A-08 Summary of Work 011100-38 A.5 States to provide material and labor to install sheet waterproofing at foundation walls. Will this scope of work be moved to Contract A-04 as the scope of work is typically performed by masonry skilled trade.
- 5.) For Contract A-08 Summary of Work 011100-39 A.16 States to provide roof curbs. Will this requirement be moved to Contract A-28 as the scope of work to size and order the roof curbs are typically performed by an HVAC skilled trade.
- 6.) Scope of Work for Contract A-08 #18 States "Provide expansion joints that are integral to the roof." No expansion joints are shown on the plans. Please indicate where expansion joints will need to be installed.
- 7.) Scope of Work for Contract A-08 #20 States "Provide metal framed Skylights including caulking related to the skylight assembly and installation". No skylights are shown on plans. Please indicate where skylights will be located.
- 8.) Some area of parapet walls show a parapet cap that is connected to the exterior wall metal installations. Will this be the responsibility of the exterior wall metals contractor to provide and install or will this be part of the A-08 roofing contract scope of work?



9.) 075300 – 3.02 Metal Deck Preparation states to "install glass fiber insulation strips specified in Section 053100..." however, 053100 does not specify the type or manufacturer of the insulation strips. 053100 3.3.G says installation is specified in division 07. Please provide manufacturer and product to be installed and required execution.

#### **RESPONSE:**

- 1.) Contract A-08 is responsible for providing coping on new screen wall as part of this alternate.
- 2.) Contract A-08 is responsible for flashing and sealing around roof penetrations for the lightning protection system as part of this alternate.
- 3.) No.
- 4.) No.
- 5.) See clarification to the scope of work issued as part of Addendums.
- 6.) An expansion joint is shown on A-131, A2/A-324, D2/A-514 (drawing updated in Addendum #5) and specified in 07 9513.
- 7.) There are no skylights on this project.
- 8.) See changes to scopes of work issued as part of Addendum No. 6.
- 9.) See Contract A-08 Scope of Work Item 4 for clarification.

Response By: _	EDiS Company / ABHA	Date: 27 April 2020	
	1 7		



TO: EDIS COMPANY	PRE-BID RFI#:092_		
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>23 APRIL 2020</u>		
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:		
REQUEST:			
Submitted By: Carrow Construction	Date:23 April 2020		
1.) Who owns foundation waterproofingRoofing scope #5 and concrete scope #16 conflict. A suggestionhave roofer do it all(including elevator pit)it would simplify everything.			
RESPONSE:			
1.) See Addendum No. 5 for foundation waterproofing scope clarifications			
Response By: EDiS Company	Date: <u>23 April 2020</u>		



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:093			
FROM: ANDREW HICKEY, EDIS COM	MPANY DATE: 23 APRIL 2020			
PROJECT: EVERETT MEREDITH MIDDLE SC	HOOL			
DWG. # / DETAIL:SPEC. SECTIO	NS:PAGE:			
REQUEST:				
Submitted By: D. Shinn	Date: <u>23 April 2020</u>			
1.) A-131 references Min. ¼" per foot slope for crickets on the roof. If the deck is structurally sloped at ¼" per foot the crickets will need to be Min. ½" per foot. Can this be verified?				
RESPONSE:				
1.) 1/4" minimum is required and refersioning crickets.	s to effective slope. This would require 1/2"			
Response By: Scott Lester, ABHA	Date:27			



TO: <u>SETH HAM</u>	MONDS, ABHA	PRE-BID RFI#:094_	
FROM: ANI	DREW HICKEY, EDIS COMPANY	DATE: <u>23 APRIL 2020</u>	
PROJECT: <u>EVERET</u>	T MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL: _	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: <u>F</u>	arrel Roofing	Date: <u>23 April 2020</u>	
<ol> <li>In volume 1 of the specifications, pg. 486 under the roof scope, paragraphs 12 and 19 mentions patching an existing roof. We were under the assumption the whole school was coming down. Please clarify.</li> <li>Per plans and specs there is 5" of insulation and a 5/8" cover board, this system is just shy of R-30, coming in around R-29. Is okay to install two layers of 2.6"?</li> <li>Where the coping ties in with the wall panel system, we need to coordinate in regards to color. Will it be a standard color or custom metallic color?</li> </ol>			
RESPONSE:			
<ol> <li>See changes to scopes of work issued as part of Addendum No. 6.</li> <li>Two layers of 2.6" is acceptable</li> <li>The color of the coping at metal wall panels is to match the wall panel color. Coping at metal wall panel locations is to be provided by Contract A-09: Metal Wall Panels. See changes to the scopes issued in Addendum No. 6.</li> </ol>			
Response By:	Scott Lester, ABHA	Date:27 April 2020	



TO: EDIS CO	DMPANY	PRE-BID	RFI#:095_
FROM:	ANDREW HICKEY, EDIS COMPA	ANY DAT	TE: <u>23 APRIL 2020</u>
PROJECT: <u>EVE</u>	RETT MEREDITH MIDDLE SCHO	OOL_	
DWG. # / DETA	IL:SPEC. SECTIONS	5:PA	AGE:
REQUEST:			
Submitted By:	HK Griffith	Date: _	23 April 2020
the MW of work channel substra girts be	tal wall panels specified required wall panels specified required. We manufacturer, which is then a for contract 09 item 1 notes probled by the for the vented hat channel. It is removed from the scope of way contract and the vented hat chancel is contract.	installed over the verovide zee furring chathe MWP manufactures are commending the 20 prk in contract 09 and	ertical Z Girts. The scope annels. These Z furring rer, they are simply a Z furring channels / Z placed into metal
RESPONSE:			
addition	ng to be provided by Contract Annal supplemental furring as received by Contract A-09.	1	1
Response By:	EDiS Company	Date: _	27 April 2020



TO: EDIS COMPANY	PRE-BID RFI#:096_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: 23 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: F. R. Beinke Wrecking	Date: 23 April 2020

- 1.) Please confirm the allowances for each contract (e.g. Demo allowance of \$25,000.00) must be in the base bid amount and also confirm that allowance amounts will be deducted in full if there are no change orders.
- 2.) Can the allowances for each bid be placed on the bid forms for clarity?
- 3.) A substantial list of soft demo scope of work items was added in Addendum #2 as scope item #41 to the Demo Contractor's (DC) responsibilities to access Asbestos. DNREC recommends soft demo work to access asbestos be completed by licensed asbestos contractors and workers in order to protect workers and the public from exposure to asbestos. Please consider removing #41scope items and have that work completed by the Asbestos Abatement Contractor (AAC).
- 4.) 3b. Please clarify that the demolition contractor will receive the testing, asbestos clearance reports, and pre-demolition survey(s) by a licensed asbestos inspector needed to obtain the demolition permit.
- 5.) Is the Demo Contractor only responsible for exposing, excavating, and loading 70 Linear feet of foundation walls contaminated with ACM Vapor barrier in the base bid?
- 6.) Instead, would you consider adding a Square Foot unit price for ACM Vapor Barrier foundation wall excavation and loading?
- 7.) What are the calendar day durations allowed for substantial completion of the Building Demolition scope and are there any penalties?



### **RESPONSE:**

- 1.) Confirmed. The allowance of \$25,000 must be included in the base bid. Any unused allowance will be refunded to the owner at the end of the project.
- 2.) No. The bid forms will remain as published.
- 3.) The scope of work will remain as described.
- 4.) This information will be provided by Environmental Testing Inc.
- 5.) Yes.
- 6.) No.
- 7.) See the construction schedule in Section 013216, issued in Addendum No. 3. There are no liquidated damages in this project.

Response By: _	EDiS Company	Date:26 April 2020



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:097_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>23 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: SecureNetMD	Date: <u>23 April 2020</u>
1.) I don't know if I missed it but is the a legend for data cables?	the electrical drawings showing the
2.) I did not see separate T drawings on the site.	
RESPONSE:	
1.) Data drops are shown on the electrical plans and on drawing E-501.	wiring called out in the schedule
2.) See addendum #6 for outside building data cable 171	e between buildings. Drawing ME-
Response By: Scott Lester, ABHA	Date:27 April 2020



TO: SETH HAMMONDS, ABHA		PRE-BID RFI#:	098
FROM: ANDREW HICKEY, E	DIS COMPANY	DATE: <u>23 APRII</u>	<u> 2020</u>
PROJECT: EVERETT MEREDITH MII	ODLE SCHOOL		
DWG. # / DETAIL:SPEC	SECTIONS:	PAGE:	
REQUEST:			
Submitted By: Roman Mosaic		Date: <u>23 A</u>	April 2020
<ol> <li>Ref. drawing I-001, Finish Legend and Notes, Alternate #1, Stair A – 199A &amp; 299A. We note this alternate indicates to provide precast terrazzo treads, risers and landings however we find no details referenced on drawing A-431 to clarify the tread &amp; riser design or thickness.         <ol> <li>Please provide a detail for these treads, risers and landings as this will impact the pricing.</li> <li>We will assume these treads, risers and intermediate landings will be installed over a steel or concrete structure provided by others (non-structural precast terrazzo) unless advised otherwise.</li> </ol> </li> </ol>			
RESPONSE:			
<ol> <li>a. Treads will be 2" in thickness. Risers will be 1-5/8" in thickness. The base structure is a steel stair.</li> <li>b. Install treads and risers over steel pan stair.</li> </ol>			
Response By: Scott Leste	r, ABHA	Date: <u>27 April 20</u> 2	20



TO: EDIS COMPANY	PRE-BID RFI#:099_		
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>		
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:		
REQUEST:			
Submitted By: <u>J&amp;G Building Group</u>	Date: <u>24 April 2020</u>		
<ol> <li>Referencing the 06 Contract, 1 I'm not finding a Architectural Metal Column Covers. I am not localling out for them</li> <li>Referencing the 06 Contract, 3 scope item #43 P spec or anything on the drawings casing out for</li> </ol>	ocating anything on the drawings  OVC railings, again I'm not finding a		
RESPONSE:			
<ol> <li>Metal column covers not required. See previous addenda for clarification to the scopes of work.</li> <li>PVC Railings not required. See previous addenda for clarification to the scopes of work.</li> </ol>			
Response By: EDiS Company	Date: <u>27 April 2020</u>		



TO: EDIS COMPANY / ABHA	PRE-BID RFI#:100
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Reybold Construction	Date: <u>24 April 2020</u>
<ul><li>1.) Which contractor is responsible for the grease tra Plumbing contractor?</li><li>2.) What size are the bollards in front of the loading</li></ul>	
RESPONSE:	
<ul><li>1.) Plumbing contractor.</li><li>2.) 6" diameter</li></ul>	
Response By: EDiS Company / ABHA	Date: <u>27 April 2020</u>



TO: EDIS COMPANY	PRE-BID RFI#:101_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Revbold Construction	Date: 24 April 2020

- 1.) A-07 scope #7 & #8 call for air barrier, water resistive barrier and insulation on outside face of exterior walls where spray foam is not indicated. Please confirm these scope items can be removed as there are no locations indicating this. All exterior wall types per A-002 show 3" spray foam and integral intumescent coating by others with no additional air barrier/ water barrier or insulation outside sheathing.
- 2.) A-07 scope #16 notes asphalt felts and Tyvek. Where are these items required as they are not called out on the plans.
- 3.) A-07 scope #18 notes plaster. All items on A-005 and A-006 note Plaster OR Gypsum Board. Confirm Gypsum Board is acceptable and Plaster will not be required on this project.
- 4.) A-07 scope #21 calls for EIFS/ Stucco. Please clarify which one is required. Note 16 on RCP calls for stucco however details A1 & A2 call for EIFS over ½" Cement Board at the same locations. Outside soffit at Entrance vestibule 100L & 100N
- 5.) A-07 scope #47 calls for PVC trim. Where are these items required as they don't appear to be called out on the architectural plans?
- 6.) A-07 scope #25 requires a trash chute. Where will this be installed? Please provide more detail.

### **RESPONSE:**

1.) There are locations without spray foam that require WRB and insulation, such as at the south and west entrance canopies



- 2.) Asphalt felts and tyvek are not required if not shown on the plans.
- 3.) There is no plaster on this project.
- 4.) Provide EIFS on 1/2" cement board.
- 5.) There is no PVC trim on this project.
- 6.) Trash chute can be premanufactured or constructed of plywood. Location to be located at the 2nd story area A or B as determined in the field and is to remain in place until instructed to be removed by the construction manager.

Response By:	EDiS Company	Date: 27 April 2020
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TO: EDIS COMPANY	PRE-BID RFI#: 102
FROM: ANDREW HICKEY, EDIS COMPA	NY DATE: 24 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SCHO	<u>DL</u>
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By:TJ Distributers	Date: <u>24 April 2020</u>
been responded to. Will there be a future answered?  2.) Page 6 of the Addenda #5 Narrative, page 6 of	cher scope; however, not all of our RFIs have re addendum where our RFIs will be ragraph o.2 indicates that there is no floor misc. equipment in section 116625, paragraph
RESPONSE:	
<ol> <li>All RFIs have been responded to throug</li> <li>Floor covering has been returned to the provided. This over-rules narrative in a exposed area when bleachers are in close</li> </ol>	scope of work and is required to be addendum 5. Flooring cover to cover sed position.
Response By: EDiS Company	Date: <u>27 April 2020</u>



TO: EDIS COMPAN	TY	PRE-BID RFI#:103_
FROM: ANDRI	EW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT M	EREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: <u>Bran</u>	dywine Contractors	Date: <u>24 April 2020</u>
, 0 0	was deleted from carpentry in Acetters added in Addendum 3 at th	ddendum 5, would that include the ne Learning Stair risers?
RESPONSE:		
1.) No. Water jet	cut letter are part of the wall pro	tection at the learning stair risers.
Response By:	EDiS Company	Date:27



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:104_
FROM: ANDREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:SPEC. SECTIONS:	PAGE:
REQUEST:	
Submitted By: Kinzer Cast	Date: <u>24 April 2020</u>
<ol> <li>Can the CALCIUM SILICATE STONE SILL be Architectural Precast Concrete? I can send col want to see what our Cast Stone product look</li> <li>Will the GFRC be done on site or do you want</li> </ol>	or samples to you @ no charge if you s like.
RESPONSE:	
<ul><li>1.) Cast stone is acceptable, refer to specification</li><li>2.) Factory fabrication is required by 03 4900.</li></ul>	04 7313
Response By: Scott Lester, ABHA	Date:27 April 2020



TO: SETH HAM	IMONDS, ABHA	PRE-BID	RFI#:105	-
FROM: AN	DREW HICKEY, EDIS COMPANY	DA	ГЕ: <u>24 APRIL 202</u>	<u>20</u>
PROJECT: EVERET	T MEREDITH MIDDLE SCHOOL			
DWG. # / DETAIL:	SPEC. SECTIONS:	P.	AGE:	-
REQUEST:				
Submitted By:I	Kent Construction	_ Date: _	24 April 2020	-
1.) On A-406 o wall? Pleas	do you want a separate image on ea se advise	ach stair riser	or 1 full image	up the
RESPONSE:				
1.) As shown	on D4/A-406, there are separate image	ages on each	riser of the Lea	rning Stair.
Response By:	Scott Lester, ABHA	Date: _	27 April 2020	_



TO: SETH HAMMONDS, ABHA	PRE-BID RFI#:106_
FROM: ANDREW HICKEY, EDIS COM	MPANY DATE: 24 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SC	HOOL
DWG. # / DETAIL:SPEC. SECTIO	NS:PAGE:
REQUEST:	
Submitted By: Modular Concepts	Date: <u>24 April 2020</u>
laminate panels on only one side of	orium call out section detail E3/A631 (shows the low wall) and D1/A434 (shows laminate at the same location. I would bet that their intent ou have the architect verify this?
RESPONSE:	
1.) Provide plastic laminate panels on	ooth sides. See Addendum No 6.
Response By: Scott Lester, ABHA	Date: <u>27 April 2020</u>



TO: EDIS COMPAN	<u>Y</u>	PRE-BID RFI#: _	107
FROM: ANDRE	W HICKEY, EDIS COMPANY	DATE: <u>24 A</u>	PRIL 2020
PROJECT: EVERETT M	EREDITH MIDDLE SCHOOL		
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: Brane	dywine Contractors	Date: _	24 April 2020
	RFI 51 item 6 says carpentry is a sn't this assigned to casework?	responsible for solid	surface wall
RESPONSE:			
, <u> </u>	in Addendum No. 6. Solid sur 12 : Casework & Millwork.	face wall protection	is to be provided
Response By:	EDiS Company	Date: _	27 April 2020



TO: EDIS COMPAN	NY / ABHA	PRE-BID RFI#:108_
FROM: ANDR	EW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>
PROJECT: EVERETT N	MEREDITH MIDDLE SCHOOL	
DWG. # / DETAIL:	SPEC. SECTIONS:	PAGE:
REQUEST:		
Submitted By: D.S	hinn	Date: 24 April 2020
A-09 summar If this portion for Spray Foa 2.) Quick question	y of work does not include this. Of work falls under Contract A-Om installers? on, A-131 references Min. 1/4" per sucturally sloped at 1/4" per foot the	intumescent coating however contract Can you clarify who is to pick this up? 19, could a sub-contract line be added foot slope for crickets on the roof. If the crickets will need to be Min. 1/2" per
RESPONSE:		
1.) Spray foam ir Contract A-04	sulation and associated intumeson: : Masonry.	cent coating is to be provided by
2.) 1/4" refers to 1	minimum slope. Crickets will req	uire 1/2" slope to meet this minimum.
Response By:	EDiS Company /ABHA	Date: <u>27 April 2020</u>



TO: EDIS COMP.	ANY	PRE-BID RFI#:109_	
FROM: ANI	DREW HICKEY, EDIS COMPANY	DATE: <u>24 APRIL 2020</u>	
PROJECT: <u>EVERET</u>	T MEREDITH MIDDLE SCHOOL		
DWG. # / DETAIL: _	SPEC. SECTIONS:	PAGE:	
REQUEST:			
Submitted By: K	nott masonry	Date:24 April 2020	
•	heet A-412 calls for split face block view. Can you please clarify?	k in the theater below 23' and where	
RESPONSE:			
including b	ehind drywall columns. All block ne north and south walls of the the	ls are to be split face block below 23' above 23' is to be standard CMU eater are covered in drywall can can l	be
Response By:	EDiS Company	Date:27 April 2020	-



ГО: EDIS COMPANY	PRE-BID RFI#:110_
FROM: ANDREW HICKEY, EDIS COM	MPANY DATE: 24 APRIL 2020
PROJECT: EVERETT MEREDITH MIDDLE SC	<u>HOOL</u>
DWG. # / DETAIL:SPEC. SECTIO	NS:PAGE:
REQUEST:	
Submitted By: <u>Carrow Construction</u>	Date: <u>24 April 2020</u>
that is the reason for the stego wrap	on drawingsdo you even need caulking,  The caulking was eliminated at Whitehall for elease tell us exactly where and we will price
RESPONSE:	
<ol> <li>Provide caulk only if shown on dra provide premolded joint filler.</li> </ol>	wings. Concrete contractor is responsible to
Response By: <u>EDiS Company</u>	Date:27 April 2020

### **SECTION 274117**

## SOUND, VIDEO, & COMMUNICATION SYSTEMS

### PART 1 - GENERAL

### 1.01 GENERAL REQUIREMENTS

A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

### 1.02 WORK INCLUDED

A. The Sound, Video & Communication System Contractor (SVCC) shall be responsible for all labor, equipment, material, and procedures required for the supply, fabrication, installation, commissioning, and warranty of the Sound, Video & Communication System (SVC) as specified herein and on the SVC Contract Drawings, including design and engineering responsibilities, and submission for review of shop drawings, reports, samples, and mock-ups. Detailed descriptions of these requirements are included in "Part 1 - General" and "Part 3 - Execution".

## B. Requirements Included:

- The scope of work of this Section shall include, but not necessarily be limited to, the following systems, equipment, material, arrangements, and procedures as indicated and specified herein for:
  - a. All labor, equipment and materials.
  - b. Supply nonstandard back boxes and floor-boxes for installation by Electrical Contractor except where noted.
  - c. Termination of all SVC equipment racks.
  - d. Provide supplemental conduit, junction/pull boxes, fittings, and electrical hardware, as required for connection of Sound equipment to the Sound empty conduit system as supplied by Electrical division.
  - e. All wire, wire pulling, and termination.
  - f. All tools and measuring & testing equipment required for installation.
  - g. Daily and final cleanup.
  - h. Shop drawings, samples and mock ups, as built documentation, and operating manual.
  - i. Testing and adjustment, interim shop inspection, initial test report, final site inspection, final test report, and demonstration and instruction.
  - j. Guarantee and warranties, and maintenance and service contract.

### C. Sound, Video & Communication System:

- See detailed description of the following system and specific information about the equipment, components, and material in "Part 2 Products":
  - a. Sound, Video & Communication System: Permanent Sound, Video & Communication System, including speech and music reinforcement, archival audio & video recording, music, effects, and prerecorded tracks processing and playback and stage monitor/foldback, utilizing the following subsystems:
  - b. Permanent loudspeaker positions, including rigging points, and cable management.
  - c. SVC equipment racks, including appropriate cabinetry.

## D. Related Requirements:

- The following systems, equipment, material, arrangements, and procedures are not included in the scope of work of this Section.
   Coordinate all work of this Section with the work specified in other sections (exceptions as noted):
  - a. A complete, pull-ready conduit system for installation of Sound, Video & Communication System wiring and devices—including all conduit and raceway, junction/pull boxes, standard back boxes, terminal cabinets and "pull group" boxes, fittings, drag line (pull line), electrical hardware, etc. (Electrical Contractor).
  - b. Electrical power service—including transformers, feeder cable, distribution panels, branch circuit panelboards, and individual wall receptacles (Electrical Contractor).
  - c. Sound, Video & Communication System "Sound, Video & Communication System" isolated ground AC power network (Electrical Contractor). Note: inter-rack AC power wiring, shall be the responsibility of the SC. Single-point termination to the racks shall be conducted on-site by the EC.
  - d. Loudspeaker suspension points
  - e. Equipment rack room (including lighting, furnishings, and finishes) (various Trades).
  - f. Painting and finishing (except as noted below for Sound, Video & Communication System equipment).
  - g. House telephone, data, life safety, fire alarm, and security systems (Electrical Contractor).

#### 1.03 DEFINITIONS

- A. In addition to the definitions in the General Conditions, the following also apply to this Section:
  - 1. The term "Architect" refers to ABHA / BSA+A.
  - 2. The term "Electrical Engineer" refers to Furlow Associates Engineering.
  - 3. The term "Consultant" refers to Acme Professional Inc.
  - 4. The term "Successful Bidder" as used in this specification refers to that Subcontractor whose bid proposal is accepted by the Owner, and who is officially named as the Sound, Video & Communication Subcontractor.
  - 5. The terms "Sound, Video & Communication Subcontractor", "this Subcontractor", "this Contractor", "SVCC" as used in this specification refer to that subcontractor directly responsible for supply and installation of the Sound, Video & Communication Systems.
  - 6. The terms "engineer" and "engineering" as used in this specification refers to the interpretation, organization, and execution of the design of the Sound, Video & Communication Systems as provided in the Contract Documents.
  - 7. The term "supply" as used in this specification indicates that the Sound, Video & Communication Subcontractor shall supply, free issue, including instruction and supervision for installation by others, such equipment, components, and material of the Sound, Video & Communication Systems so as to fulfill the intent of the Contract Documents.
  - 8. The term "provide" as used in this specification indicates that the Sound, Video & Communication Subcontractor shall supply, fabricate, install,

- and make operable such equipment, components, and material of the Sound, Video & Communication Systems so as to fulfill the intent of the Contract Documents.
- 9. The terms "pre-approved equivalent" and "or as approved" as used in this specification indicate that acceptance shall be obtained from the Consultant. Refer to "Product Substitution" below.
- 10. The terms "NIC" or "not in contract" as used in this specification indicate an item or system that shall be furnished under another contract. Preparation for the future inclusion of such an item or system shall be limited to the extent outlined in the Contract Documents.
- 11. The terms "OEM" or "original equipment manufacturer" or "manufacturer" as used in this specification refer to a direct supplier to the Sound, Video & Communication Subcontractor.
- 12. The term "by others" as used in this specification and on the contract drawings indicates work not included in this section of the contract but provided by others as part of the General Contract.
- 13. "UON" denotes "unless otherwise noted."
- 14. "AFF" denotes "above finished floor."
- 15. "U" denotes "rack unit," as in "10U" to denote 10 standard 44mm (1.75") rack units, for a total of 440mm (17.5") of rack space.

### 1.04 SCOPE OF WORK

- A. The Sound, Video and Communication Subcontractor (SVCC) shall be responsible for all labor, equipment, material, and procedures required for the supply, fabrication, installation, commissioning, and warranty of the Production Sound, Video and Communication Systems (SV&C Systems) as specified herein and on the SV&C Systems Contract Drawings, including design and engineering responsibilities, and submission for review of shop drawings, reports, samples, and mock-ups. Detailed descriptions of these requirements are included in "PART 1 GENERAL" and "PART 3 EXECUTION".
- B. The scope of work of this Section shall include, but not necessarily be limited to, the following systems, equipment, material, arrangements, and procedures as indicated and specified herein.
  - 1. All labor, equipment, and material.
  - 2. Supply nonstandard back boxes and sequential power switching system equipment for installation by Divisions 26 and 27 except where noted.
  - 3. Termination of receptacles in Sound, Video & Communication equipment racks.
  - 4. Provide supplemental conduit, junction/pull boxes, fittings, and electrical hardware, as required for connection of SV&C equipment to the Sound, Video & Communication empty conduit system as supplied by Division 27.
  - 5. All wire, wire pulling, and termination.
  - 6. All tools and measuring & testing equipment required for installation.
  - 7. Daily and final cleanup.
  - 8. Shop drawings, samples and mock-ups, as-built documentation, and operating manual.
  - 9. Testing and adjustment, interim shop inspection, initial test report, final site inspection, final test report, and demonstration and instruction.
  - 10. Guarantee and warranties, and maintenance and service contract.

- 11. Technical Systems: see specific information about the equipment, components, and material in "PART 2 PRODUCTS":
- 12. Loudspeaker array rigging
  - a. Provide labor and materials necessary to hang and install loudspeaker arrays as shown in drawings. Refer to 116133 for general rigging requirements.
- C. The following systems, equipment, material, arrangements, and procedures are not included in the scope of work of this Section. Coordinate all work of this Section with the work specified in other sections (exceptions as noted):
  - 1. A complete, pull-ready conduit system for installation of Sound, Video & Communication Systems wiring and devices—including all conduit and raceway, junction/pull boxes, standard back boxes, rack room terminal cabinets and "pull group" boxes, fittings, drag line (pull line), electrical hardware, etc. (Division 27).
  - 2. Installation of nonstandard back boxes for Sound, Video & Communication Systems devices (to be concurrent with other electrical work) (Division 27).
  - 3. Electrical power service—including transformers, feeder cable, distribution panels, branch circuit panel-boards, and individual wall receptacles (Division 26).
  - 4. Sound, Video & Communication Systems "sound system" isolated ground AC power network (Division 26). Note: inter-rack AC power wiring, shall be the responsibility of the SVCC. Single-point termination to the racks shall be conducted on-site by the EC.
  - 5. Loudspeaker array rigging (Theatrical Equipment Contractor see Section 11 6131 and Architectural Specification).
  - 6. Equipment rooms, rack rooms, and control rooms (including lighting, furnishings, and finishes) (various Sections).
  - 7. Painting and finishing (except as noted below for Sound, Video & Communication System equipment).
  - 8. House telephone, data, life safety, fire alarm, and security systems (Division 28).

### 1.05 BID REQUIREMENTS

- A. The equipment may be furnished, installed, and provided by the following:
  - Masque Sound
     East Union Ave
     Eat Rutherford, NJ 07073
     201-939-8666
     Attn: Scott Kalata
  - Sound Associates Inc
     979 Saw Mill River Road
     Yonkers, NY 10710
     914-963-3453
     Phillip Peglow ppeglow@soundassociates.com
  - 3. Delaware AV 9 James Court Wilmington, DE 19801 302-655-1600

- 4. Brandywine Electronics 611 Carson Drive Bear, DE 302-324-9992
- 5. CTSi 212 E Main Street, Ste 214 Salisbury, MD 21801 410-583-8900

### B. Post-bid

- 1. Subcontractor Submittal
  - a. Submit two (2) copies of the following lists, schedules, and bills of material, including the names of manufacturers, manufacturers' model numbers, quantities, and prices:
    - 1) Category pricing information, separately listing equipment, wire, and labor pricing for each of the following XX (XX) categories.
    - 2) A complete and accurate list of all of the equipment, components, and material specified in the Contract Documents.
    - 3) A schedule of wire and cable as specified in the Contract Documents.
    - 4) A list of requests for approval of equivalent equipment, components, material, or systems, per the requirements listed in "Product Substitution" below.
    - 5) A list of test equipment to be used in system testing and adjustment, per the requirements listed in "Part 3 Execution: Testing and Adjustment."
    - 6) A list and description of any equipment or material required for completion of this Section that is not included in the Contract Documents and is not shown on the Architectural or Electrical Contract Documents as being specified by other sections.
    - 7) A list and description of any changes required to the installation of the empty conduit system, including but not limited to relocation or resizing or reduced or additional conduit, for Sound, Video & Communication Systems equipment provided by Division 26.
    - A separate cost amount, per year, for a maintenance and service contract for a period of five (5) years. Include a complete description of services to be furnished and a schedule of planned maintenance visits. When the Sound, Video & Communication Systems Contract is awarded, the Successful Bidder shall be obligated to furnish the services described, for the fees quoted, should the Owner elect to purchase this separate contract prior to the end of the Guarantee and Warranty period. Refer to "Maintenance and Service Contract" below.

- b. In the event that additional conduit is required to fulfill the intent of the Sound, Video & Communication Systems, the bidder shall include any additional wire in the bid.
- c. Any financial or scheduling implications for additional work specified in other sections, as recommended by a bidder, shall be assessed prior to award of this Section.
- 2. Construction Manager and Consultant Review
  - a. The Construction Manager and Consultant shall refer to the lists, schedules, and bills of material outlined above in order to determine fulfillment of the requirements of the Contract Documents. Based on the Construction Manager and Consultant's review, a bid not meeting these requirements shall be rejected.
  - b. These lists, schedules, and bills of material are included for the purpose of evaluation. The acceptance a bid based on these submissions shall not be understood to relieve the Successful Bidder of the responsibility of meeting any and all requirements of the Contract Documents.

### 3. Product Substitution

- a. The Sound, Video & Communication Systems equipment, components, and material specified are called out in terms of products as supplied by specific original equipment manufacturers. Bids shall only be considered from those bidders who present a bid based exactly on the products specified.
- b. If an original equipment manufacturer or other supplier has permanently stopped fabrication of a specified item or has replaced an item with an almost identical item that has a new model number, the bidder notify the Architect, within sufficient time for amendment of the Contract Documents,
- c. Bidders are advised that requests for approval of equivalent equipment, components, and material of other OEMs or suppliers are permitted. Such products shall be evaluated on the basis of equivalent quality and performance. The Consultant shall be the sole judge of performance equivalency and shall give written approval, by addendum, of all product substitutions. Prior to the bid closing date, sufficient catalog data, specifications, technical information, and samples shall be submitted for a complete evaluation by the Consultant. Any proposed product substitutions must be submitted to the Construction Manager seven (7) calendar days prior to the bid closing date.
- d. While the equipment, material, arrangements, and procedures described in the Contract Documents indicate specific details for realization of the Sound, Video & Communication Systems, bidders may propose alternate products and details that shall fulfill the functional parameters of the outlined system. In such event, bidders shall submit a complete set of alternate Contract Documents not less detailed than these and following the same general format. Also submit a detailed statement indicating where the equipment, material, arrangements, and procedures that shall be offered differ from those specified in the original

Contract Documents. Prior to the bid closing date, any changes to the original Contract Documents shall be evaluated and given written approval by the Construction Manager and Consultant. Any proposed alternate products and details must be submitted to the Construction Manager seven (7) calendar days prior to the bid closing date.

#### 1.06 RESPONSIBILITIES

### A. General

- 1. Provide complete and working Sound, Video & Communication Systems as outlined in the Contract Documents.
- 2. Carry out work in accordance with best trade practices, and engineer, fabricate, provide and install all items in accordance with the Contract Documents, the manufacturers' recommendations and in compliance with applicable codes, and consult with other trades performing adjoining work in order to provide an installation of first-class quality.

### B. Extent

- 1. Provide all labor, equipment, material, and procedures required, listed, scheduled, mentioned, or implied in the Contract Documents to engineer, fabricate, install, and commission the Sound, Video & Communication Systems.
- 2. Provide also all labor, equipment, material, and any necessary incidental items not specifically called for in the Contract Documents but required for a complete and satisfactory installation of the Sound, Video & Communication Systems.
- 3. Ensure that all equipment, components, and material specified or otherwise required to complete the installation are compatible with each other and with the conditions of expected use.
- 4. Any errors, omissions or ambiguities in the Contract Documents are not to condition these requirements, but shall be brought to the attention of the Construction Manager and Consultant for evaluation of any possible effect on the intent of the Contract Documents. Submit all notifications in writing to the Construction Manager and Consultant. Lack of such notification shall be understood to indicate acceptance of all requirements of the Contract Documents, and any future claims shall be rejected.

### C. Coordination

- 1. The Owner wishes to delay key SV&C Systems equipment purchases until just prior to fabrication and installation in order to take full advantage of technology advancements. Coordinate equipment purchase schedule with Consultant and General Contractor.
- Refer to Electrical & Technology Drawings to determine Sound, Video & Communication Systems device quantities and general locations. Refer also to Architectural drawings for exact device locations.
- 3. Be familiar with the requirements of Divisions 26 and 27 Electrical to ensure the coordination of the work in this Section with the work of the Electrical Contractor.
- 4. Provide the Electrical Contractor with drawings, diagrams, and other information in order to ensure proper coordination of the AC power system and Sound, Video & Communication System empty conduit

- installations. This work shall be part of this Contractor's early coordination effort, and shall be provided in a timely manner according to a schedule of the project established by the Construction Manager.
- 5. Coordinate work of this Section with the work of other trades so that all installations are executed in such a manner as to ensure proper system performance. Provide appropriate mounting of equipment and components and avoid conflicts in positioning of the various installations of other contractors and trades.
- 6. References to the Construction Manager or other trades shall in no way modify the responsibility of this Contractor to provide a coordinated, complete, and working installation of all work required by the Contract Documents.
- 7. All drawings, schedules, RFIs, and other communication shall be coordinated with and submitted through the Construction Manager.

### D. Means And Methods

 The Sound, Video & Communication Contractor is solely responsible for the means and methods of all fabrication and installation techniques, sequences and procedures of construction, and shall be responsible for coordination of these items with and through the Construction Manager and the Consultant.

## E. Sub-Contractors

1. Use of Sub-Contractors by the Sound, Video & Communication Subcontractor shall in no way modify its responsibility.

## F. Suppliers

1. Use of a product from a particular original equipment manufacturer, whether specified in the Contract Documents or substituted by the Sound, Video & Communication Subcontractor, shall in no way modify its responsibility. Refer also to General Conditions.

### G. Site Dimensions And Conditions

- 1. The Sound, Video & Communication Subcontractor is solely responsible for the correctness of dimensions and quantities, shall verify site conditions, and obtain site dimensions and quantities required for proper installation of the work included in this Section; and shall be responsible for coordination of these with and through the Construction Manager. The Sound, Video & Communication Subcontractor shall take dimensions on site for all equipment and material that shall be provided (including custom fabricated components) and be entirely responsible for their accuracy.
- 2. Examine the work of other trades at the site to ensure that all aspects of the related work are in the proper condition to receive the work included in this Section.
- 3. Obtain through the Construction Manager, where necessary, copies of relevant base building Contract Documents, including shop drawings, to ascertain existing field conditions not open to view (e.g., wall or ceiling construction).
- 4. In particular, verify all necessary field conditions including, but not limited to: the size, routing, and location of all conduit and raceway, pull/junction boxes, cast-in-place back boxes, and accommodation of non-standard backboxes. Also verify size and configuration of the

- Control Rooms, House Mix Position, and Equipment Rack Rooms. Such information is critical to the production of accurate shop drawings.
- 5. Provide any additional drawings, information, or templates where work by other trades must be modified for the proper installation and operation of the work included in this Section.
- 6. Do not begin manufacture of any custom fabricated equipment or components until satisfied that the devices, as designed, shall fit in the space available.
- 7. Provide all additional items required for the completion of the Sound, Video & Communication empty conduit system, as specified in Section 27 0527 and supplied by the Electrical Contractor, including but not necessarily limited to conduit hardware, back boxes, and wire to accommodate site conditions, and in order to complete the interpretation of the Contract Documents with no change in the contract price. Any changes to equipment details and/or mounting details shall be reviewed and approved by the Construction Manager and Consultant prior to shop fabrication or field installation.

## H. Design And Engineering

- 1. The requirements outlined in the Contract Documents establish basic design parameters including means of operation, control, dimensions, and visual appearance. The Sound, Video & Communication Subcontractor's design responsibilities shall include:
  - a. Interpreting the Contract Documents so as to accomplish the purposes described.
  - b. Carrying out the execution of the work.
  - c. Modifications of, and additions to, the details as may be required to fulfill the intent of the Contract Documents.
  - d. Maintaining the design/control/operation concepts as described in the Contract Documents.
- 2. The Contract Documents describe performance attributes of the systems that shall be provided under this Section and, as such, are not Professionally Engineered documents. This Contractor is responsible for the engineering of systems described in the Contract Documents.

## I. Painting And Touch Up

- 1. The Sound, Video & Communication Contractor shall be responsible for painting all Sound, Video & Communication Systems equipment and components exposed to view and shall also be responsible for the correction of minor cosmetic damage so that all Sound, Video & Communication Systems equipment and components are in clean and unblemished condition at the time of the final site inspection by the Owner and Consultant.
- 2. Any non-cosmetic damage shall be promptly repaired or replaced by this Contractor, prior to the final site inspection and without cost to the Owner.

### J. Cleanup

 In addition to the requirements outlined in the General Conditions, leave work areas clean and in proper order at the end of each workday. Coordinate with Owner's performance and rehearsal schedule, as required.

### K. Omissions And/Or Errors

1. Omissions and/or errors within the Contract Documents shall not relieve this Subcontractor of the responsibility for providing a properly functioning installation of the Sound, Video & Communication Systems as outlined in "PART 2 – PRODUCTS".

### L. Safety And Code Requirements

- 1. The Sound, Video & Communication Systems equipment, material, arrangements, and procedures shall conform to the applicable local building, electrical and safety codes in the State of Delaware and all other applicable code requirements, with industry standards of operation and practice, and applicable safety requirements. The completed installation shall allow the users to work and operate the Sound, Video & Communication systems in a safe environment.
- 2. Regulations, codes of practice, and other reference documents cited in the Contract Documents shall apply to the work of this Section with the same authority as if included word for word in this specification.
- 3. Where provisions of the Contract Documents supplement those of cited reference documents, the more stringent provisions shall apply. Refer also to General Conditions.

#### 1.07 SUBMITTALS

### A. Project Timetable

- 1. Submit a Sound, Video & Communication Systems project timetable for approval, after consultation with the Construction Manager and the Consultant.
- 2. This timetable shall outline scheduling and dates for all project milestones including design and engineering, shop drawing submittal and review, sample and mock-up submittal and approval, shop fabrication, interim shop inspection, site installation, testing and adjustment, initial test report submittal and approval, final site inspection, final test report submittal and approval, operating manual and as-built documentation submittal and approval, demonstration and instruction, and project completion.
- 3. Be aware of the following when preparing the project timetable:
  - a. The Consultant shall be allowed at least fourteen (14) days for review of each submittal.
  - b. Each submittal shall be revised and resubmitted as required by the Consultant.
  - c. The Consultant reserves the right to modify or disapprove the submittal list or timetable.

### B. Pre-Submittal Meeting

1. The Sound, Video & Communication Subcontractor shall meet with the Construction Manager and the Consultant after the project timetable has been submitted and prior to beginning work on shop drawings. The project manager and chief project designer for the Sound, Video & Communication Subcontractor must attend and be prepared to review the timetable, and to discuss the concepts described in the Contract Documents and proposed methods of execution of those concepts. The SVCC should expect to attend regular coordination meetings at the site for the full duration of the Project as part of this Contract.

## C. Shop Drawings

- 1. Contractor Submission
  - a. Submit, through the Construction Manager as specified in the General Conditions, shop drawings for submittal to the Consultant. Shop drawings shall include all information necessary to fully explain design features, engineering details, appearance, function, fabrication, mounting, installation, and interconnection of all equipment.
  - b. This submittal shall include the following:
    - 1) Block diagrams (indicating all equipment interconnection and wiring).
    - 2) Schematic diagrams of custom circuitry and equipment.
    - 3) Equipment rack layouts.
    - 4) Patch panel layouts (including full-scale drawings of all patch panel labels).
    - 5) Connector pinouts.
    - 6) Custom receptacle plate, combination panel, and stage manager console layouts (full scale drawings required).
    - 7) Custom mounting brackets.
    - 8) Mounting conditions and methods for all devices.
    - 9) Wiring distribution diagrams and wire pulling schedules.
    - 10) Detail drawings as required.
  - c. Submit names of the original equipment manufacturers or other suppliers, the specific model numbers of all Sound, Video & Communication Systems components, appropriate OEM catalog sheets, and technical data sheets. Submit also detailed descriptions of any required modifications to the specified equipment.
  - d. Submit a complete, itemized list of all equipment and material that shall be provided as part of the Sound, Video & Communication Systems. All equipment and material shall be listed by the same name, and in the same order as it appears in "PART 2 PRODUCTS." Submit also similar lists for the portable equipment, spare parts, and test equipment to be supplied.
  - e. Shop drawings shall represent actual fabrication and installation details. Information on all shop drawings shall be designed, engineered, and drafted by this Contractor. Direct reproductions of contract drawings are not acceptable as shop drawings and shall be rejected. Requests for electronic files of contract drawings shall be denied.
  - f. Provide shop drawings separated into the various systems, where each set of drawings contains that information necessary to describe each system completely. The shop drawing submittal shall also include a fully referenced table of contents.

### 2. Consultant Review

a. The shop drawings shall be reviewed by the Consultant and shall be approved before the Sound, Video & Communication Subcontractor begins fabrication and installation of any aspect of the Sound, Video & Communication Systems. Note that the

- review of shop drawings by the Consultant is to determine conformance with the design concept and with information included in the Contract Documents. Only those shop drawings returned to this Subcontractor with a satisfactory review status shall be used in the execution of this Section.
- b. Non-conformities and errors detected during the shop drawing review shall be noted on the drawings and returned to the Sound, Video & Communication Contractor upon completion of the review. The Subcontractor is responsible for the completeness and accuracy of the shop drawings.
- c. Shop drawings or packages of shop drawings that are incomplete shall be marked "rejected" until such time as the complete set of relevant drawings is submitted. It is impossible for the Consultant to adequately review technical equipment submissions unless all details have been adequately represented.
- d. Approval of those shop drawings that include any nonconformities or errors that are not detected during the Consultant's review shall not relieve this Subcontractor of the sole responsibility to provide an installation adhering strictly to the requirements of the Contract Documents.
- e. Shop drawing review does not include engineering calculations by the Consultant unless expressly indicated on the drawings.

## 3. Samples And Mock-Ups

- a. After review of appropriate shop drawings, submit one (1) sample each of the following items, clearly labeled with manufacturer name, model number, and other pertinent data, for approval by the Consultant:
  - 1) A typical wall receptacle plate, with connector and engraved legend (e.g., an "IRE" plate).
  - 2) A 300mm x 300mm (12" x 12") section of a typical combination panel, with one (1) sample of each type of scheduled connector, and sample engraved legends.
  - 3) Factory or custom finishes for equipment racks, cabinets, blank and vent rack panels, and communication control panels and pendants.
  - 4) All cloth and/or metal grille material, with integral framing or support construction where appropriate.
  - Custom paint samples for Sound, Video & Communication Systems devices requiring a change in color from that supplied by the manufacturer. Each sample shall be applied to a 150mm x 150mm (6" x 6") piece of material closely matching the surface characteristics of each device type to be painted. On the back of each sample indicate the painting system, type of paint for each coat (including primer), the color and sheen of the finish coat, and description of the item(s) and location(s) where the color on the paint sample will be used.

### 4. Record Drawings

a. Keep a complete set of white prints of the specification and all contract drawings for this Section of the work, as well as shop

- and installation drawings. Any changes made during installation should be carefully noted and transferred to the appropriate documents to show "as-installed" work.
- b. At the time of the initial test report submission, submit one (1) corrected set of record drawings and shop/installation drawings for review by the Consultant.
- c. Late changes or adjustments, performed as corrections to punch list items or as change orders after practical completion of the contract, shall be reflected on updated record drawings by this Subcontractor.
- d. After review by the Consultant, make any required revisions to the record drawings until the contents are satisfactory to the Consultant.

### 5. Operating Manual

- a. Provide four (4) copies of operating manuals. Mark each section with tabular dividers using permanent labels protected by plastic.
   All drawings (B-size and larger) shall be folded into individual vinyl pockets (often referred to as "sheet protectors"). Include the following items:
  - 1) Title sheet labeled "Sound, Video & Communication Systems—Operating Manual", project name, and date.
  - 2) Table of contents.
  - Names, addresses, and phone numbers of Sound, Video & Communication Contractor, sub-Contractors, and suppliers.
  - 4) Final version of the equipment list.
  - 5) System description.
  - 6) Operating instructions.
  - 7) Periodic maintenance procedures.
  - 8) List of all spare parts and equipment.
  - 9) Complete OEM data sheets, operating manuals, service manuals, and related documentation.
  - 10) Storage media (CD/DVD) containing purchased software, backed-up downloaded software, and digital signal processor software final configuration.
  - 11) Block and schematic diagrams of all systems.
  - Plugging key plan, showing wiring and receptacles (i.e., a quick-reference chart of combination panels, wall receptacles, and patching only).
  - 13) Device, wiring, termination, and hardware schedules.
  - 14) List of equipment design parameters including safe working capacities, maximum simultaneous operations, and similar information.
  - 15) Maintenance instructions for finished surfaces and material.
  - 16) The Final Test Report (see below).
- b. Prepare one (1) draft copy of the Operating Manual for review by the Consultant four (4) weeks prior to the final site inspection. The document shall be clearly marked "FOR REVIEW."
- c. After review by the Consultant, make any required revisions to the Operating Manual until the contents are satisfactory to the

Consultant. Four (4) copies of the final approved version shall be supplied in accordance with the General Conditions.

## 6. Mounted Block Diagram

a. Provide a half-size (minimum) print of each Sound, Video & Communication Systems block diagram in each corresponding control room and equipment rack room. Mount each diagram in a glass enclosed frame and securely mount in each control/rack room adjacent to the equipment racks. Block diagrams shall be of approved record drawings.

#### 1.08 COMMISSIONING

## A. Testing And Adjustment

1. Perform tests and adjustments to the Sound, Video & Communication Systems at the project milestones indicated below, and as specifically outlined in "PART 3 - EXECUTION: Testing and Adjustment."

## B. Interim Shop Inspection

- 1. Demonstrate the functions of all major systems, equipment, assemblies, and subassemblies of the Sound, Video & Communication Systems in the shop or factory no later than four (4) months prior to project completion. Perform all tests and demonstrations in the presence of the Consultant. The systems, equipment, and components that shall be demonstrated include, but are not necessarily limited to, the following:
  - a. Sound System mixing consoles, with associated portable signal processing racks and cabling.
  - b. Sound System equipment racks (for Sound Control Room, and Amplifier Rack Room).
  - c. Stage Manager's Consoles, and associated extension cables.
  - d. Communication System equipment racks (for Communication Rack Room).
- 2. Notify the Consultant at least three (3) weeks prior to the date when all systems, equipment, assemblies, and subassemblies are complete and ready for testing. The equipment shall be made available to the Consultant for a period of at least one (1) week for testing and inspection prior to shipment. Do not ship any piece of equipment without either written verification of successful shop testing, or waiver of shop testing from the Consultant.
- 3. Prepare a draft of the initial test report (outlined below), indicating all pre-installation or shop testing, and submit the report to the Consultant for review prior to shipment of equipment from this Contractor's shop.

## C. Initial Test Report

- 1. Perform all testing outlined in this specification (refer to PART 3 EXECUTION: Testing and Adjustment). This shall occur after substantial completion of the Sound, Video & Communication Systems, and before scheduling the final site inspection.
- 2. Submit a complete report on the results of all testing and adjustments for review by the Consultant, and also certify, in writing, that the work of this Section is complete and operational in every respect, and that the Sound, Video & Communication Systems are ready for the final site inspection.

## D. Final Site Inspection

- 1. Upon approval of the initial test report, the Sound, Video & Communication Subcontractor shall notify the Construction Manager and Consultant, in writing, and schedule the final site inspection for a time no later than four (4) weeks prior to the scheduled substantial completion of the project. During this inspection demonstrate all the tests described in this specification, and be prepared to demonstrate the operation of any or all portions of the Sound, Video & Communication Systems, as requested by the Consultant.
- 2. Furnish sufficient technicians to operate all equipment and to perform such tests and adjustments as may be required by the Consultant during this inspection. Provide also sufficient engineering and field service personnel to aid the Owner and Consultant, and to direct the technicians in testing, adjusting, and explaining the systems. Ensure that ladders and other means are provided to allow access to all devices to be tested. Ensure that no other work is scheduled in the audience chamber or stage areas during the time of this inspection. All temporary bracing, scaffolding, etc., shall be removed to permit full operation of, and access to, all equipment.
- 3. Should the work inspected not be substantially performed at the time of first inspection, this Contractor shall compensate the Owner for any consulting and transportation costs incurred by the Owner and Consultant during all inspections.
- 4. If the system does not fulfill each and every aspect of the Contract Documents, make all necessary adjustments or other required changes in order to bring the installation into conformance with the Contract Documents at no additional cost to the Owner.

## E. Installed System Measurement, Verification and Optimization

- 1. Upon completion of the Final Test Inspection, proceed with the measurement and optimization of the performance loudspeaker systems as described in PART 3 EXECUTION: Testing and Adjustment. This Subcontractor shall have arranged for and scheduled rental of a complete Meyer Sound Laboratories SIM3 multi-channel measurement system and shall have subcontracted a Consultant-approved SIM3 operator (Bob McCarthy [bob@bobmccarthy.com] or Andrew Hope [andrew@gerr.com] preferred) who will conduct the actual measurements and supervise the optimization of these systems with the Consultant. This measurement process shall be scheduled for a period of three (3) consecutive days for the Music Hall. Ensure that no other work is scheduled in the audience chambers or stage areas during the time of this procedure. All temporary bracing, scaffolding, etc., shall be removed to permit full operation of, and access to, all equipment.
- 2. Furnish sufficient technicians to help operate all sound system equipment and to perform the various corrective tasks that are revealed during this procedure, including rigging adjustments and polarity correction. Provide any relevant backup or spare equipment including loudspeaker drivers, amplifier modules and software/computer spares. Provide all required support equipment such as computer monitors, keyboards, two-way radios, etc. Ensure that ladders and other means are provided to allow access to all devices to be tested.
- F. Final Test Report

1. After completion of the final site inspection and loudspeaker system optimization, submit a final version of the complete report on all testing and adjustment outlined in this specification for review by the Consultant. The final test report shall be accompanied by a letter certifying that the Sound, Video & Communication Systems conform to the Contract Documents, that the installation is complete in all details, that the final site inspection is complete and successful, that the system optimization is complete in all details and that the system ready to be turned over to the Owner. The final test report shall include updated results from the initial test report, printouts of the SIM3 measurement plots showing pre and post optimization, and hardcopy of final digital signal processor configurations and delay and equalization values.

#### G. Demonstration And Instruction

- 1. Instruct the Owner and/or the facility's operating personnel in the operation and care of the systems during two (2) separate sessions for not less than a total of sixteen (16) hours. This instruction shall include:
  - a. Operating procedures for proper use of all systems.
  - b. Proper maintenance of all systems.
  - c. Replacement procedures for user replaceable parts.
- 2. The first demonstration and instruction session shall occur directly after acceptance of the final test report. The second session shall occur at a time arranged by the Owner and/or the facility's operating personnel, and shall be no sooner than the next day and no later than one (1) month afterwards. The precise timing of these sessions shall be determined by the Owner, at the Owner's convenience. The sessions shall be recorded to digital video by this Contractor (or other format as directed by the Owner). One set of DVD's shall be submitted to the Owner within one (1) week following the recording.
- 3. Instruction shall be by qualified expert operators who have actual experience with the system in performance conditions. Submit instructors' qualifications to the Consultant at least two (2) weeks prior to the demonstration and instruction session. Should the Consultant find this Contractor's instruction personnel lacking in qualifications, the instruction sessions shall be rescheduled with new instructor(s), also pre-approved by the Consultant.
- 4. As a portion of this instruction, present the final, approved version of the Operating Manual to the Owner, Construction Manager and Consultant for preview at least two (2) weeks prior to the first instruction session. Review the contents of the Operating Manual with the Owner and/or the facility's operating personnel as part of the first session.

### H. Guarantee And Warranties

- 1. General
  - a. Furnish the Owner with a written warranty in accordance with General Conditions, covering all engineering, equipment, material, and installation workmanship incorporated into the work of this Section, until two (2) years after date of substantial completion of the project.
- 2. Service Calls
  - a. All guarantee and warranty work shall be carried out at no additional cost to the Owner for any labor, parts, shipping or

transportation. Warranty replacement equipment shall be provided within 24 hours of official notice by the Owner.

## 3. Equipment Warranties

- a. Warranty of replacement equipment and components shall be the same as for the original devices, and shall begin on the date of installation of the replacement item. Replace spare parts used during the warranty period at no additional cost.
- b. In the absence of a maintenance and service contract (outlined below), honor all extended warranties provided by original equipment manufacturers beyond the two (2) year guarantee outlined above. The Sound, Video & Communication Contractor shall not be responsible for any labor, transportation, shipping, or miscellaneous costs not covered by the OEM incurred during service calls to repair or replace extended warranty equipment after the first year.

## 4. Follow-Up Testing and Adjustment

a. Provide technicians to test and adjust the Sound, Video & Communication Systems, at a mutually agreed upon time, approximately six (6) months after substantial completion of the project. This follow-up visit shall include any needed testing and repair of all items covered under the guarantee, and testing and readjustment of all items identified in the maintenance procedures. Provide a written report to the Owner and Consultant outlining the extent and results of the follow-up testing and adjustment.

# 5. Repeated Failures

a. If a particular component, part, or piece of equipment fails more than three times during the warranty period, the failure shall be deemed to be due to engineering and/or installation error. In this event take action within 24 hours of official notice by the Owner to modify or correct the defect by replacement of faulty equipment and/or changes to engineering concepts or installation methods.

### 6. Maintenance And Service Contract

- a. In addition to providing guarantee and warranty service, make available to the Owner a separate service contract to begin after expiration of the guarantee and warranties outlined above. The service contract shall be at the Owner's cost, renewable yearly, and available for the life of the Sound, Video & Communication Systems. This service contract may be provided directly by this Contractor or through an approved local or regional service center.
- b. The service contract shall cover every item provided and supplied under this section of the contract. Service offered shall include, but not necessarily be limited to, repair of components, temporary "loaner" equipment, replacement of parts, and a regular maintenance program for all equipment in the Sound, Video & Communication Systems. The service contract shall specify a guaranteed response time.

#### PART 2 – PRODUCTS

## 2.01 EQUIPMENT AND MATERIAL

- A. All equipment and material shall be new, of the highest quality appropriate to the application and of uniform appearance throughout the system. Only equipment and materials from established original equipment manufacturers of sound and communication equipment shall be used. Components shall be commonly available and field replaceable, where possible.
- B. All equipment and component enclosures shall be welded or tightly fitted assemblies of sheet steel with angles, channels and tees forming rigid frames for support of outer cabinetwork and internal components. Construction with anodized aluminum is acceptable only where specified.
- C. Unless otherwise stated, all rack-mounted electronic and electrical equipment and components shall conform to EIA 19" standard. Any devices not specifically designed to be rack mountable shall be adapted, by professionally acceptable methods, to meet the EIA standard.
- D. The rack height of all equipment and components noted in this specification is in 1.75" (44mm) units, or spaces. (i.e., a 5.25" device, that is three rack spaces high = "3U").

# 2.02 EQUIPMENT

	description	mfr	model	qty
	AUDITORIUM			
A	Mixing System / Playback			
1	F-XLR Stage Box to M-XLR Tails, 12ch , 50'	Whirlwind	ME-12-M-NR-50	1
2	Digital Mixing Console System, 48kHz,	Midas	Midas M32R	1
3	Console fixed format I/O, 32 Analog ip, 16 Analog op, 4 AES op	Midas	DL32	1
4	Console fixed format I/O, 16 Analog ip, 8 Analog op	Midas	DL16	1
5	2U Rack for DL16	Gator	G-Tour 2U	1
6	Rack Mounted Analog Mixer	ART	MX622	2
7	iPad Air 2, 32GB, WiFi, w/ Apple SmartCase	Apple	iPad Air 2 32GB WiFi	1
8	WiFi Router	Netgear	R6700 AC1750	1
9	CD/Bluetooth/USB Digital Audio Player	Tascam	CD-400U	1
В	Main Loudspeaker System - Auditorium			
1	Main Loudpeaker Array	d&b audiotechnik	ALi90	3
2	Main Loudspeaker Array Frame	d&b audiotechnik	Z5455	1
3	Proscenium Side Loudspeaker	d&b audiotechnik	E12-D	2
4	Prosc Side Loudspeaker Flying Adapter	d&b audiotechnik	Z5254	2
5	Backstage Foldback Loaudspeaker	d&b audiotechnik	5S	4
6	Backstage Foldback Loaudspeaker Brkt	d&b audiotechnik	Z5422	4
7	Custom #12 NL2 Cables for Permanent Loudspeakers	Whirlwind	\$200 Allowance	1

8	Miscellaneous Rigging Materials incl Safeties for all Loudspeakers	Custom	\$500 Allowance	1
9	4-Ch Power Amplifier w/ DSP Processing	d&b audiotechnik	30D	2
С	Self-powered Portable Monitor/Effects Loud	speakers		
1	Self-powered Monitor Loudspeaker - Large	Yamaha	DXR10	2
	description	mfr	model	qty
D	Wireless Microphones			
1	UHF Combo Wireless Mic System Recvr/Handheld/Bodypack	Sennheiser	EW312/335G3-A	2
2	UHF Wireless Mic System Recvr/Handheld Tx	Sennheiser	EW335G3-A	2
3	Active Antenna Splitter for 4 Receivers, incl PSU & 2 Antenna	Sennheiser	G3OMNIKIT4	1
4	Rechargeable Battery Pack for Handheld & Bodypack Tx	Sennheiser	BA2015	6
5	Dual Drop-In Charger for Handheld & Bodypack Tx	Sennheiser	L2015	3
6	PSU for up to 3 L2015	Sennheiser	NT3-1US	1
7	Handheld Tx Charger Adapter	Sennheiser	LA2	6
8	Miscellaneous Rigging Materials for Antenna Mounting	Sennheiser	\$100 Allowance	1
Ε	Wired Microphones & Direct Boxes			
1	Handheld, dynamic Microphone	Shure	SM-58LC	5
2	Handheld, dynamic Microphone w/switch	Shure	SM-58S	1
3	Dynamic Instrument Microphone	Shure	SM-57LC	2
4	Condenser Instrument Microphone, cardioid	Shure	SM-81LC	2
5	Condenser Recording Microphone, cardioid, Matched Pair	Neumann	SKM 184 ni	1
6	Hanging Chorus Microphone	DPA	SC4098-BM15	4
7	Direct Box, Jensen, single-ch	Radial	JDI	2
8	Direct Box, Jensen, PC/iPod	Radial	JPC	1
9	Instrument Cable, 10'	Whirlwind	SN10	2
10	iPod Cable, 3.5mm Stereo>2x M-XLR, 6'	Whirlwind	MST2XM06US	2
F	Microphone Stands			
1	Microphone Stand, Round Base, Black	K&M	260/1	2
2	Microphone Stand, One-hand clutch, stackable, Black	K&M	26075	6
3	Microphone Stand, Tripod w/ Boom, Black	K&M	210/8	2
4	Microphone Stand, Short, Round Base, w/ Boom, Black	K&M	25960	1
5	Microphone Boom Arm	K&M	211/1	4

6 7 8 9	Microphone Clamp Microphone Holder Microphone Desk Stand, Black Microphone Stand Crate	K&M K&M Atlas Custom	238 240/5 DS7E \$500 Allowance	2 2 4 1
G	Portable Microphone Cable			
1	Microphone Cable, Canare/Neutrik, 10'	Whirlwind	MK410NP	4
2	Microphone Cable, Canare/Neutrik, 25'	Whirlwind	MK425NP	8
	description	mfr	model	qty
3	Microphone Cable, Canare/Neutrik, 50'	Whirlwind	MK450NP	8
4	Microphone Cable, Canare/Neutrik, 100'	Whirlwind	MK4100NP	2
Н	Wired Intercom System			
1	Intercom Main Station, 2ch	ClearCom	PS-702	1
2	Intercom Beltpack, 1ch	ClearCom	RS-701	4
3	Intercom Wall Speaker Station, 4-Gang, 2ch	ClearCom	KB-702	6
4	Intercom Wall Headset Station, 2-Gang, 2ch	ClearCom	HB-702	1
5	Intercom Handset	ClearCom	HS-6	2
6	Intercom Headset, Single muff	ClearCom	CC-300-X4	5
ı	Assistive Listening System			
1	FM Assistive Listening System, w/transmitter, 4 receivers	Listen	LS-17-072	1
2	Receiver, digital	Listen	LR500	8
3	Charging case, for 4 receivers	Listen	LA-317-01	3
4	Rechargeable battery	Listen	LA-362	12
5	Neck loop, for telecoils	Listen	LA166	2
6	Ear Buds	Listen	LA-161	12
J	Audio Program Monitor System			
1	House Microphone	Shure	VP82	1
2	Microphone Mounting Hardware, Allowance	Custom	\$50 Allowance	1
3	Portable Phantom Power Supply	Samson	S-Phantom	1
4	70v Power Amplifier w/ Rack Kit	Crown	CSA-140Z	1
5	Surface Mount loudspeaker w/ 70V transformer	Tannoy	DVS4T	8
6	Volume control, 70V, 35W	Atlas Sound	AT35D	
K	Equipment Rack, Portable Equipment Storage	Cabinet		
1	Equipment Rack	MiddleAtlantic	BGR-4532-SA-LRD	2
2	Rack Top, vented	MiddleAtlantic	BGR-LVT	2
3	Rear door, with cable entry	MiddleAtlantic	BGR-RDC45	2
4	Cable Lacer Bars - 10pk	MiddleAtlantic	LBP-1.5	2
5	Vent Panels as Required	MiddleAtlantic	\$100 Allowance	1
6	Blank Panels as Required	MiddleAtlantic	\$100 Allowance	1
7	1sp Brush Panel	Middle Atlantic	BR1	2

8	3U Rack Drawer w/ Lock	MiddleAtlantic	TD3LK	
9	Rack Panel Screws	MiddleAtlantic	HP500	1
10	TechFlex, 1.25"-2.75" expandable tubing	TechFlex	PET8-50-BK	1
11	Rack Mount power Conditioner	Furman	PL-PRO C	4
12	Internal Rack Work Light	MiddleAtlantic	WL60	2
13	Cable Management, in rack, vertical cable tray	Hellerman, equal	2x2, 3x3	1
	description	mfr	model	qty
14	Storage Cabinet w/ 6 Shelves, 48"w x 19"d x 72"h	McMaster Carr	4775T71	1
15 16	48port Gigabit Network Switch 24port Gigabit Network Switch	Hewlett Packard Hewlett Packard	2530-series 2530-series	1 1
L	Custom Panels, Patch Panels			
1	Custom Panel, laser-etched, black aluminum	WW Custom	C01	1
2	Custom Panel, laser-etched, black aluminum	WW Custom	C02	1
3	Custom Panel, laser-etched, black aluminum	WW Custom	C03	1
4	Floorbox incl: FMCA2200, MPK, MPR, BB200D	Mystery Elec	C04	1
5	Floorbox incl: FMCA2200, MPK, MPR, BB200D	Mystery Elec	C05	1
6	Floorbox incl: FMCA2200, MPK, MPR, BB200D	Mystery Elec	C06	1
7	Custom Panel, laser-etched, black aluminum	WW Custom	C07	1
8	Custom Panel, laser-etched, black aluminum	WW Custom	C08	1
9	Floorbox incl: FMCA2200, MPK, MPR, BB200D	Mystery Elec	C09	1
10	Custom Panel, laser-etched, black aluminum	WW Custom	C10	1
11	Custom Panel, laser-etched, black aluminum	WW Custom	C21	1
12	Custom Panel, laser-etched, black aluminum	WW Custom	C22	1
13	Custom Panel, laser-etched, black aluminum	WW Custom	'S1' Receptacles	10
14	Custom Panel, laser-etched, black aluminum	WW Custom	'S2' Receptacles	2
15	Custom Panel, laser-etched, black aluminum	WW Custom	'A2' Receptacles	3

16	Custom Panel, laser-etched, black aluminum	WW Custom	'D2' Receptacles	3
17	Custom Panel, laser-etched, black aluminum	WW Custom	"Tie Lines Patch"	2
18	Custom Panel, laser-etched, black aluminum	WW Custom	"Mic Patch"	1
19	Custom Panel, laser-etched, black aluminum	WW Custom	"Console Patch"	1
	description	mfr	model	qty
20	Custom Panel, laser-etched, black aluminum	WW Custom	"Line Patch"	1
21	Custom Panel, laser-etched, black aluminum	WW Custom	"Speaker Patch"	1
22	Custom Panel, laser-etched, black aluminum	WW Custom	"Amplifier Input"	2
23	Custom Panel, laser-etched, black aluminum	Leviton	"CAT6 Patch"	1
M 1 2 3	Bulk Cable, Pre-Made Cables A1 - Microphone cable, 1pr - 1000' A2 - Microphone cable, 2pr - 1000' A4 - Microphone cable, 4pr - 1000' D1 - 750hm RG-6/U Low Loss Coaxial Cable - 1000'	Belden Belden Belden Belden	9451 1509C 1510C 1694A	LOT LOT LOT
5 6	D2 - 50ohm RG-8/U Coaxial Cable - 1 Foot D3 - 4x23 AWG Twisted Pair, CAT6 - 1000'	Belden West Penn	9914 4246	LOT LOT
7	E1 - 20 AWG Twisted Pair, Mylar Shield- 1000'	West Penn	292	LOT
8	F1 - 2x 12 AWG Stranded Copper w/ PVC Jacket - 1000'	Belden	5000UP	LOT
9	F2 - 4x 12 AWG Stranded Copper w/ PVC Jacket - 1000'	Belden	5002	LOT
10	G1 - 2x 14 AWG Stranded Copper w/ PVC Jacket - 1000'	West Penn	226	LOT
11 12	LOT, Pre-made Cables for all Interconnect LOT, Pre-made Cables for all Patching	Custom Custom	\$1,000 Allowance \$500 Allowance	1 1
N	SVC ADD ALT #1 - Video Projection System			
1	7000 lm WUXGA Laser Video Projector	Panasonic	PT-RZ770	1
2	Mount for Projector	TBD	\$500 Allowance	1
3	16:10 Fixed Frame Projection Screen w/ Pro Masking Border Accessory	<del>Da-Lite</del>	Series 200 Lace & Grommet; 108"x192"	4

4	HDMI/VGA > HDBaseT Transmitter Wall Plate	Atlona	AT-HDVS-150-TX- WP	3
5	HDBaset-T/HDMI 8x4 Video Switcher	Atlona	AT-UHD-CLSO-824	1
6	Dual 7" HD Rack Mount Video Monitor	ELVID	SRM-7X2-LT	1
7	CD/BLU-Ray Player	Denon	DN-500BD	1
8	Apple TV; 32GB	Apple	Apple TV	1
9	iPad-based Remote Control Gateway	Global Cache	GC-100-19	1
	description	mfr	model	qty
0	SVC ADD ALT #2 - Wireless Intercom System			
1	2.4GHz Wireless Intercom System, 4 Users incl. Headsets	HME	CZ11432	1
Р	SVC ADD ALT #3 - HD Video Camera & Recorder			
<b>P</b>		Panasonic	AW-HE2P/E	1
1 2	Recorder  HDMI Camera, w/1/4.37 CMOS sensor  Desktop Remote Control for Video Camera	Panasonic Panasonic	AW-RP50	1 1
1	Recorder HDMI Camera, w/1/4.37 CMOS sensor		AW-RP50 AW-HS50N	•
1 2	Recorder  HDMI Camera, w/1/4.37 CMOS sensor  Desktop Remote Control for Video Camera	Panasonic	AW-RP50	1
1 2 3	Recorder HDMI Camera, w/1/4.37 CMOS sensor Desktop Remote Control for Video Camera Compact Live Video Switcher	Panasonic Panasonic	AW-RP50 AW-HS50N AT-UHD-EX-70C-	1 1
1 2 3 4	Recorder  HDMI Camera, w/1/4.37 CMOS sensor  Desktop Remote Control for Video Camera  Compact Live Video Switcher  HDMI CAT6 Extender Transmitter/Receiver	Panasonic Panasonic Atlona	AW-RP50 AW-HS50N AT-UHD-EX-70C- KIT	1 1 1
1 2 3 4 5	Recorder  HDMI Camera, w/1/4.37 CMOS sensor  Desktop Remote Control for Video Camera  Compact Live Video Switcher  HDMI CAT6 Extender Transmitter/Receiver  HDBasetT > HD SDI Converter	Panasonic Panasonic Atlona AJA	AW-RP50 AW-HS50N AT-UHD-EX-70C- KIT HB-R-SDI	1 1 1 1
1 2 3 4 5 6	Recorder  HDMI Camera, w/1/4.37 CMOS sensor  Desktop Remote Control for Video Camera  Compact Live Video Switcher  HDMI CAT6 Extender Transmitter/Receiver  HDBasetT > HD SDI Converter  HD SDI Dual Hard Disc Recorder	Panasonic Panasonic Atlona AJA Blackmagic Design	AW-RP50 AW-HS50N AT-UHD-EX-70C- KIT HB-R-SDI Hyperdeck Studio 2	1 1 1 1 1
1 2 3 4 5 6	Recorder  HDMI Camera, w/1/4.37 CMOS sensor  Desktop Remote Control for Video Camera Compact Live Video Switcher  HDMI CAT6 Extender Transmitter/Receiver  HDBasetT > HD SDI Converter  HD SDI Dual Hard Disc Recorder  480GB SATA Hard Disk for Hyperdeck Studio	Panasonic Panasonic Atlona AJA Blackmagic Design SanDisk	AW-RP50 AW-HS50N AT-UHD-EX-70C- KIT HB-R-SDI Hyperdeck Studio 2 480GB Ultra II	1 1 1 1 1 1
1 2 3 4 5 6 7	Recorder  HDMI Camera, w/1/4.37 CMOS sensor Desktop Remote Control for Video Camera Compact Live Video Switcher  HDMI CAT6 Extender Transmitter/Receiver  HDBasetT > HD SDI Converter  HD SDI Dual Hard Disc Recorder  480GB SATA Hard Disk for Hyperdeck Studio  SATA Disk USB Dock	Panasonic Panasonic Atlona AJA Blackmagic Design SanDisk Xcellon	AW-RP50 AW-HS50N AT-UHD-EX-70C- KIT HB-R-SDI Hyperdeck Studio 2 480GB Ultra II HDD-01 Sata	1 1 1 1 1 1

#### **PART 3 – EXECUTION**

## 3.01 QUALITY ASSURANCE AND WORKMANSHIP

- A. The Sound, Video & Communication System Contractor shall follow good working practices and fabricate and install items in accordance with the manufacturer's recommendations and the Consultant's specifications. Provide quality control procedures acceptable to the Owner and Consultant. Provide a properly qualified site supervisor who shall carry out supervision duties only. Provide straight, plumb, true and aligned components throughout, and shall consult with other trades doing related work and adjoining work in order to provide an installation of first-class quality.
- B. The Consultant reserves the right to reject any part of the installation not in compliance with the Contract Documents. The Sound, Video & Communication System Contractor shall carry out any necessary remedial work or replacement free of charge and without delay to the Owner.
- C. A standard reference guide for the design, engineering, and installation of the Sound, Video & Communication System shall be Audio System Design and Installation, by Philip Giddings (Sams Publishing).

#### 3.02 DEFINITIONS

- A. Electrical Reference:
  - The following electrical references are used throughout the Sound, Video & Communication System specification:
    - a. Voltage: dBv = 20log(E1/E2)
    - b. Power:  $dB = 10\log(P1/P2)$
    - c. 0dBu = 0.775VRMS; ratio of voltages measured open circuit
    - d. 0dBv = 0.775VRMS; ratio of voltages measured open circuit
    - e. 0dBV = 1.0VRMS; ratio of voltages measured open circuit
    - f. OdBm = 1mW; power level (typically 0.775V into 600-ohm load)
    - g. 0VU = +4dBm; power level referenced to 600 ohms

## B. Electrical Characteristics:

- 1. Unless otherwise specified in the Contract Documents, electrical characteristics of the Sound, Video & Communication System equipment shall be as follows:
  - a. Microphone preamplifier inputs shall be balanced, have an impedance greater than or equal to 1.2k ohms, and designed to be driven from sources of 600 ohms or less.
  - b. Line inputs shall be balanced bridging, have an impedance greater than or equal to 10k ohms, and designed to be driven from sources of 10k ohms or less.
  - c. Line outputs shall be balanced, have an impedance less than or equal to 100 ohms, and designed to drive loads of 600 ohms or greater.
- C. Connector Polarity: Proper polarity of connectors on combination panels, receptacle plates, rack panels, patch panels, and other devices fabricated and/or wired by this Contractor shall be established as follows: Polarity of connectors for OEM devices and equipment may be different, and should be wired to patch panels so as to maintain consistent system polarity.
  - 1. Microphone and Line Level

#### a. Balanced Connection

XLR-3 connectors: pin 1 = ground/shield (do not connect to case); pin 2 = high ("hot"); and pin 3 = low ("cold").

1/4" T/R/S phone connectors: sleeve = ground/shield; ring = low ("cold"); and tip = high ("hot").

b. Unbalanced Connection

XLR-3 connectors: pin 1 = ground/common/shield (do not connect to case); pin 2 = high ("hot"); and pin 3 = tie to pin 1 only.

1/4" T/S phone connectors: sleeve = ground/common/shield; and tip = high ("hot").

Phono (RCA) connectors: sleeve or shell = ground/common/shield; and center pin = high ("hot").

- 2. Multiconductor Application
  - a. Multipin connectors: Refer to the manufacturer's specifications.
- 3. Data Connection
  - a. RJ45 connectors: Refer to the manufacturer's specifications.
- 4. Video and RF Level
  - a. BNC-type connectors: sleeve or collar = ground/shield; and center pin = signal ("hot").
- 5. Low Impedance Loudspeaker Level
  - Neutrik NL4 series connectors used for bi-amplified or passive (mono-amplified) Sound, Video & Communication System loudspeakers: pin "1+" = Low frequency or full-range driver "+"; pin "1-" = Low frequency or full-range driver "-"; pin "2+" = High frequency driver "+"; pin "2-" = High frequency driver "-"
  - b. Neutrik NL4 series connectors used for 70.7 volt lines: pin "1+" = high ("hot"); pin "1-" = N/C; pin "2+" = N/C; and pin "2-" = low ("common").
- D. Transducer Polarity: Proper polarity of electro-acoustic transducers shall be established as follows, with exceptions as noted:
  - 1. Microphone
    - a. Positive acoustic pressure on the microphone diaphragm produces a positive voltage on pin 2, with respect to pin 3 of the output connector.
  - 2. Loudspeaker
    - a. Positive voltage applied to the (+) terminal produces a displacement of the loudspeaker cone away from the magnet, thus producing a positive acoustic pressure.

### 3.03 INSTALLATION

- A. General:
  - 1. All equipment except portable equipment shall be securely held in place with a safety factor of at least three; except that all equipment rigged

- overhead shall be so done using safe rigging practices and with rated hardware selected to meet a safety factor of at least ten. All equipment shall be installed in such a fashion as to present no safety hazard to operating personnel.
- 2. All equipment shall be adequately ventilated when operating under worst-case power dissipation.
- 3. All metal cabinets connected to the Sound, Video & Communication System audio ground network shall be effectively isolated from any conduit or other metallic component that is connected to the building electrical safety ground.
- 4. All installation work shall be carried out in a neat and orderly fashion.

## B. Wiring:

- 1. Ensure by drawing review and field survey that the conduit/raceway infrastructure is sufficient for the proper installation of the specified and required wire and cable, and/or any approved-substitute types of wire and cable.
- 2. Do not begin pulling Sound, Video & Communication System wiring through the Sound, Video & Communication System Empty Conduit System until all conduit, pull boxes, etc. for each given run (point-to-point) are completely installed by the Electrical Contractor and ready for such wire and cable installation. Undertake a field inspection of the conduit system and pull boxes, reporting any missing conduit, harp edges, missing bushings or drag lines, blocked runs, etc., prior to attempting installation of wire and cable.
- 3. The Sound, Video & Communication System Contractor shall ensure that the wire and cable is installed in a manner that shall neither cause nor permit damage to the wire and cable throughout the installation process. Damaged wire and cable (including wire and cable spliced in violation of specified requirements) shall be rejected and replaced by this Contractor at no cost to the Owner.
- 4. All microphone level, line level, video/RF level, Data level, low impedance loudspeaker level, and AC power level wiring shall be restricted to individual and separate conduit systems.
- 5. All microphone and line level wiring shall be balanced and floating, unless otherwise indicated.
- 6. Take all necessary precautions to prevent electromagnetic, electrostatic, and radio frequency interference.
- 7. Care should be taken in wiring and installation to prevent damage to wire or equipment. All wire entering racks or other equipment shall have a service loop of at least four (4) feet unused (slack) length after termination. This service loop shall be neatly bundled and harnessed in place.
- 8. No splices shall be allowed in microphone, line level, video/RF or data cables unless it is physically impossible to install the wire in one length. Splices must be approved by the Consultant on a case-by-case basis. When approved, the following splicing methods may be used:
  - a. Crimp-type "butt" splice connectors with an appropriately sized shrink tube for each conductor, as well as an overall shrink tube for all audio and intercom cable types.

- b. Female BNC "barrel" connectors for video/RF cable. Male BNC connectors shall be provided on cable ends at location of the splice.
- c. Female 8P8C (commonly known as RJ45) "barrel" connectors for Data cable. Male 8P8C connectors shall be provided on cable ends at the location of the splice.
- d. Splices in loudspeaker cable are permitted without prior approval by the Consultant. Such splices shall be kept to a minimum.
- e. Any splices made shall occur only at junction boxes, pull boxes or other permanently accessible locations. Such splices shall be listed on a schedule provided with the as-built documentation.

## C. Flexible Cords and Cables:

- 1. Flexible cords used shall be selected giving consideration to ambient and conductor temperatures, wear-resistance, flexing, and mechanical stress. Vulcanized rubber, butyl rubber, EP, or silicone rubber insulated cables shall be used in preference to PVC insulated types, wherever possible. All flexible cords and cables shall comply with the current edition of the applicable local Electrical Codes and appropriate regulations as identified in "Part 1 General: Safety and Code Requirements".
- 2. Flexible cables used as hanging or trailing leads, for power or control circuits, shall comply with the previous clause and shall, if under tension, be fitted with a strain-relief center core that shall be clamped at both ends to relieve the strain on conductors. Trailing leads shall be of a suitable length for the actual application.
- 3. The segregation of conductors carrying different category circuits shall be as defined in the applicable regulations (local, state and national Electrical Codes and elsewhere herein) and shall be maintained in all flexible cables used. Adequate insulation shall be ensured on all multicore and control circuits.
- 4. Where the final connection to any equipment is by means of a flexible cable, such flexible cable shall have the same current rating as the rest of the circuit. The current ratings for the ambient temperature shall be as given in the applicable local Electrical Code.

## D. Labeling and Marking:

- All Sound, Video & Communication System wire and cable shall be logically and permanently marked by the Sound, Video & Communication System Contractor. All wire shall be identified at each termination point, and shall be marked to indicate the discrete destination (i.e., a wire shall show the reference number of the jack or connector to which its other end is terminated). All cable markers shall bear the alphanumeric characters of the circuit shown on the approved shop drawings.
- 2. Wire and cable shall be marked with an approved system of durable identification markers, such as slip-on type PVC or neoprene sleeves, or with directly heat stamped characters. The use of computer-generated labeling systems, such as the Brady DAT-34 or DAT-37, is recommended. Cloth, vinyl or P-Touch tape-type markers are not acceptable.
- 3. The individual pairs of multipair cable and individual conductors of multiconductor cable shall be readily identified by permanent color

- coding of the wire insulation. Multipair or multiconductor cable that is identified only by means of the form or order of lay of individual wire is not acceptable.
- 4. All spare wire shall be marked "spare" at both ends and numbered consecutively. A "spare schedule" shall be provided indicating spare wire and cable numbers, locations and types.

#### E. Termination:

- 1. All connections and joints shall be made with rosin-core solder or an approved mechanical connector.
- 2. All multipin connectors shall have crimp-type gold-plated contacts.
- 3. All Contactor-terminated data cables & connections must be "certified" using industry-standard testing and verification equipment.
- 4. Where flexible cable joins fixed wiring the terminations shall be accomplished with either a pair of appropriate mating connectors or a suitable terminal block.
- 5. All terminations of shielded cables shall consist of a PVC or neoprene heat shrink sleeve covering the shield drain wire and an overall PVC or neoprene heat shrink sleeve covering the point at which the cable jacket and shield end.

## F. Audio Grounding:

- 1. All shielded cables shall have their shields isolated from both the conduit system and any other shielded cables. Shields shall be continuous from source to input points. Shields shall be connected at input points only, with shields lifted at the source, except as noted below.
- 2. Microphone wiring shall have continuous shields from the microphone receptacle to microphone patch jack.
- 3. Tie-line patch points shall have continuous shield connection from one patch jack to another with no permanent connection to the audio ground network.
- 4. Unbalanced wiring, such as used in certain communication systems, shall have audio shields connected at device inputs and floated at device outputs. Strap shield to "low" side of unbalanced input.
- 5. No "doubling up" of ground points on multipin connectors or terminal blocks shall be allowed.

## G. AC Power System:

1. AC power for the Sound, Video & Communication System, provided by the Electrical Contractor, is distributed at 120VAC, 60Hz. Refer to the electrical plans for further information.

## H. Grounding:

- 1. The Sound, Video & Communication System audio ground network ("audio ground"), including ground source, ground conductors, and ground distribution points is provided by the Electrical Contractor. The isolation and ground continuity of this network, although the responsibility of the Electrical Contractor, shall be confirmed by the Sound, Video & Communication System Contractor prior to installation of equipment. Any ground shorts or faults shall be reported for correction by the Electrical Contractor.
- 2. The audio ground network shall be isolated from all other electrical grounds except at the source of the ground network, the building safety

- ground, specified to be of high quality. Therefore, if the connection between the audio ground network and the source of the ground is disconnected, no continuity between the audio ground and the building electrical ground shall exist.
- 3. The Sound, Video & Communication System audio ground network connects all Sound, Video & Communication System equipment positions together by a single, low impedance, ground network. All AC power wall receptacles in Sound, Video & Communication System areas, provided by the Electrical Contractor unless otherwise indicated, will be the isolated ground type, connected only to the associated audio ground spur in that area.
- 4. All Sound, Video & Communication System equipment racks containing active electronics shall be connected to the audio ground network, except as otherwise noted in this specification. Caution must be exercised so that these racks are not permanently, or in any way during operation, capable of being accidentally connected to the building safety ground.
- 5. All conduits and back boxes containing Sound, Video & Communication System wiring shall be permanently connected to the building electrical safety ground.
- 6. Video (RF) and infrared (RF) devices, being unbalanced in nature, shall not be connected to the Sound, Video & Communication System audio ground network.

### I. Electrical Safety:

- 1. No voltage in excess of 25V rms AC or 24V ripple free DC shall be exposed to touch in normal use or in any equipment by the withdrawal of modules or of any plug or connector or without the removal of suitably indelibly labeled covers.
- 2. Unless specifically excepted, all live electrical parts above 50V rms AC or 60V ripple free DC, including terminals, shall remain completely shrouded by insulation or grounded metal when the main access panels are removed. The separate shrouds or covers shall require a tool to remove them to prevent inadvertent contact with live parts.
- 3. In addition, where enclosures or items of equipment containing predominantly control, computer, or similar low voltage signals also contain voltages in excess of 50V rms AC or 60V ripple free DC, clear standard warning notices indicating the maximum voltage present shall be provided on all removable access panels. Similar warning notices shall be provided where voltages exceeding 120V are present in any enclosure or item of equipment and such a voltage would not reasonably be expected to be present.
- 4. Within enclosures, racks and panels identify with prominent, standard, and indelible signage, which circuit breakers or disconnects are to be switched off in order to isolate the equipment totally. Warning notices shall also be provided on all equipment that contains live terminals after operation of its circuit breaker or disconnect. These terminals must be completely shrouded to prevent inadvertent contact.
- 5. All equipment, control stations, equipment racks, enclosures, and all metal cases, raceways, and conduit shall be efficiently grounded. Special hand held or portable equipment that is not double insulated shall have duplicated grounding connections. All grounding shall be in accordance

with the current edition of the applicable local, state and national Electrical Codes and as identified within this Section and Division 13.

## J. Control System Voltage:

Control circuits shall generally be operated at a maximum of 24V AC or DC as appropriate, and in compliance with the protection described.
 Hand held control panels shall not contain line (120V) voltage unless approved. Special arrangements to feed movable panels with both line voltage and control voltage must provide suitable mechanical protection and ensure separation of services using the correct category of cable as defined in the codes and regulations identified in "Part 1 - General: Safety and Code Requirements".

# K. Equipment:

- Operating parts of all equipment shall be suitably machined and finished.
  Tolerances, fits, finishes, etc., where not specified herein or indicated on
  the drawings, shall conform to best trade practices and the operational
  intent of the equipment.
- 2. All components shall be of new or recent manufacture, built within two (2) years of the date of installation and never used prior to installation.
- 3. All components and items used in Sound, Video & Communication System shall be by a recognized manufacturer specializing in professional Sound and electrical equipment and shall conform to applicable industry and code standards.
- 4. The quality of workmanship and materials of all equipment and components requiring custom fabrication shall be comparable to that of professional audio equipment as produced by specialized original equipment manufacturers.
- 5. All components used in the equipment installations shall be selected on the basis that each item, or a similarly performing substitute, will be obtainable by the Owner for a period of five (5) years should further spares be required.
- 6. All electronic components shall be readily available from at least two recognized manufacturers.
- 7. Custom firmware (EPROM, ROM, etc.) shall be supported by readily available spares.
- 8. All equipment forming part of a given system or installation, and all like components, spares and replacements shall be electrically and mechanically interchangeable.
- 9. Electrical and electronic components shall be selected for long operating life and reliability. The design of components and assemblies shall ensure that all such components work at a minimum of 25% less than their maximum ratings.
- 10. All integrated circuits containing program code and all circuits with twenty four or more pins shall be mounted in sockets.
- 11. All indicators, controls, fuses, relays, contactors, printed circuit cards, and other major components shall each be fitted with a permanent label indicating their type, rating, and duty to expedite any necessary replacement or fault finding. Where applicable, a means of identifying normally open, normally closed, and other contact configurations shall be marked on the component.

- 12. Annunciators, indicators, and fuses in individual power and electronic systems shall be standardized and approved by the Consultant before design is finalized. Indicating devices shall be of as few different types as possible and wherever practicable shall have a minimum life of 10,000 hours.
- 13. All contactors and relays (although not necessarily special approved types such as reed relays) shall be of the snap-track type developed for mounting inside equipment rack. Generally the contact rating shall be twice the expected maximum operating or inrush current whichever is the greater.
- 14. Fuses and circuit breakers shall be panel mounted. Fuses shall be mounted in indicating fuse holders, illuminated when the fuse has failed. Where fuses must be concealed they shall be easily accessible. All panels with concealed fuses shall be marked accordingly on the outside and shall have panel mounted indicator lights. Spare fuses shall be provided in holders mounted within the panel.
- 15. All internal switches shall be clearly and permanently labeled.
- 16. All connectors external to the equipment shall be of rugged metal construction with self-contained locking devices. Nonmetallic external connector shells are unacceptable.
- 17. All keyswitches and keylocks for similar components shall use the same key. Unless otherwise specified, keys shall be removable in all positions. Supply four (4) key copies for each keyswitch/keylock.
- 18. All edge connectors, ribbon cable connectors and headers shall have gold-plated contacts. All IC sockets shall be of a face-wipe, gas-tight design.

### L. Assemblies:

- 1. Manufacturing, assembly, and wiring work shall be carried out by trained and experienced technicians.
- 2. Ensure that all parts and components of electrical, electronic, or computer installations are readily accessible for inspection, service, and maintenance. All components shall be replaceable without removal of operational components other than those mounted on or carrying the faulty component. All parts shall be replaceable without strain or damage to other parts.
- 3. Electrical and electronic systems shall be constructed as separately removable modules. Where a system comprises a large number of similar modules, these modules shall be designed so as to be easily interchangeable. Where such equipment is of a plug-in type, withdrawing or replacing the modules with the power "on" shall not cause damage to the units or to other equipment.
- 4. Electrically dissimilar modules or connectors shall not be able to be wrongly connected. Operating surfaces of control panels/consoles shall be of steel, aluminum, or other rigid material, reinforced where necessary to prevent noticeable panel deflection. Generally, all sides of a control panel shall be fully supported.
- 5. Where possible all control and connection panels shall have hinging or drawer access to electronics for installation and maintenance. Panels shall be held closed by captive quick locking hardware. Provide terminal strips, and neatly bundled wiring to facilitate access. Captive fasteners

shall be provided for all removable panels or parts. Any inaccessible nuts shall be fixed. Countersunk or instrument head screws shall be used on external surfaces.

## M. Custom Fabrication:

- 1. Particular attention shall be paid to the selection of operational components used on custom pendants and control panels. All such components shall be selected for long life under arduous conditions, including rough use in a dusty and dirty environment.
- 2. Pushbuttons, selector switches, key switches, operating knobs, handles, and similar shall all be rugged industrial-type components, firmly mounted and capable of giving long trouble-free service. Commercial-grade units will not be accepted.

#### N. Finishes:

- 1. Unless otherwise indicated, all steel equipment cabinets and panels shall be finished with one coat of primer and two coats of semi-gloss baked enamel after full degreasing and rust preventing processes. Colors shall be as selected by the Consultant or as specified herein.
- 2. Aluminum panel surfaces shall be anodized black or other color as indicated herein or on the drawings.
- 3. Finishes subjected to high temperatures shall be of heat-resistant epoxy or other durable high-temperature baked-on enamel finish.
- 4. Finishes shall be durable and capable of withstanding normal usage in the areas in which they are installed.

### O. Equipment Racks:

- 1. All internal wiring of electrical, electronic or computer equipment shall be in accordance with the current editions of the applicable Electrical Code and governing regulations as identified in "Part 1 General: Safety and Code Requirements".
- 2. All internal wiring shall be of adequate mechanical strength as well as electrical current rating. Multistrand cables shall be used for low current wiring in preference to solid conductors. The current carrying capacity of all cables within equipment enclosures shall take account of de-rating factors and ambient temperatures in accordance with applicable local, state and national Electrical Code regulations.
- 3. All terminal strips shall be logically positioned and indelibly marked in accordance with the circuit drawings. Generous space shall be left for installation of the external cables.
- 4. All terminals, to which connections are to be made by Division 16, shall have clear markings that are unique for each terminal and are as identified on the shop drawings.
- 5. All internal wiring shall be color coded and contained within raceways. At least 40% space shall be available as initial spare capacity. All the conductors of a given power circuit shall be contained within the same conduit or raceway. All internal wiring shall be protected from mechanical damage.

### P. Labeling:

1. All wall receptacle plates shall be engraved and filled to indicate the reference number of the circuit to which each is attached. Such numbers will, when applicable, be referenced to the patch panel jack to which the

- circuit connects. Refer to the contract drawings for reference numbers and designations.
- 2. Panels and receptacles must be readable in dim lighting. Quality of engraving and filling, letter sizes, etc. shall comply with "Part 2 Products: Receptacle Plates" of this specification and as approved by the Consultant through shop drawing and sample submittal.
- 3. All legends shall be engraved and filled in a color as indicated on the drawings, unless otherwise noted below.
- 4. Where required, engraved, adhesive-backed lamacoid labels shall also be mechanically fixed in place only in those cases where there is no risk of damage to a device's internal components or wiring.

## Q. Noise from Equipment

- 1. The residual noise and hum output of the systems shall be such that PNC-15 or below can be measured at the center of main floor, and the character of the remaining noise must be random, with no audible discrete frequency components.
- 2. Where a control panel or rack is to be used or located in an operational area, such as on stage, a gallery, or control room, there shall be no acoustic noise associated with the panel. No internal cooling fans or similar moving or magnetic equipment shall be permitted unless approved by the Consultant in writing.
- 3. Operation of switches, pushbuttons, relays, solenoids, and similar shall not be audible to members of the audience (even in the control rooms with the window open).

## R. Spare Parts

- 1. Supply spare parts to be stored on-site for all user serviceable equipment and systems. A sufficient quantity of bulbs, fuses, knobs, switches, and other miscellaneous parts shall be supplied. Refer to "Part 2 Products" for spares of electronic and transducer parts to be supplied.
- 2. Label all spare parts with manufacturer's part number, designation, description, and location(s) where part is used. Provide neatly labeled storage containers for all spare parts, including special static free wrapping for electronically sensitive parts.
- 3. The spare parts shall be released to the Owner after completion of the commissioning procedure.

## S. Site Work

1. The Sound, Video & Communication System Contractor shall be responsible for delivery, storage and handling of equipment and tools during the period of the installation.

## T. Painting

- 1. Except for special requirements as approved by the Consultant, each painting system shall use paint products of one manufacturer to ensure compatibility of primer and undercoat with top coats.
- 2. All paint products shall be factory prepared of the best grade and quality (front line) produced by the manufacturers, subject to approval by the Consultant.
- 3. Finish coats on components exposed to view at all locations shall be two (2) coats of approved finish.

- 4. The Sound, Video & Communication System Contractor shall be held wholly responsible for the finished appearance of the painting work. Painting will be in accordance with the highest standards of the trade.
- 5. All components exposed to view shall be shop painted to match approved samples.
- 6. Re-touch all shop painted or finished work wherever necessary or as directed, including unpainted screws and other fasteners. Prime paint all patched portions in addition to all other specified coats.

#### U. Protection Of Work

- 1. Shipping and Storage
  - a. The Sound, Video & Communication System Contractor shall be responsible for the satisfactory packing and protection of all components and materials for shipment from the factory to the site. Any items suffering damage during transit due to unsatisfactory packing shall be replaced without charge to the Owner.
  - b. All equipment shall be packed to withstand the intended method of transport and environmental conditions expected. This Contractor shall take full account of the effects of rough handling, temperature extremes, dust, heavy rain, direct sunlight, and high relative humidity (up to 99%) during transit and installation. The packing shall, where necessary, reduce the effects of condensation.
  - c. All equipment shall be packed in sturdy containers to provide mechanical protection during shipping and storage. Provide padding, etc., as necessary to protect the equipment from vibration and shock.
  - d. Inner plastic sheeting shall be provided to protect the equipment from moisture and dust. Such covers shall be kept on equipment until environmental conditions have stabilized and the installation areas have been completed.
  - e. No equipment shall be shipped to the job site by this Contractor until notification by the Contractor that storage facilities are available to protect the equipment prior to installation.
  - f. The Sound, Video & Communication System Contractor shall be responsible for storage and protection of portable equipment and components until turning these items over to the Owner during commissioning. Instruct the Owner as to the proper method of storage and protection of the equipment during installation.
  - g. Refer also to the General Conditions, as amended by the Supplementary Conditions.

## 2. Installation

- a. Installation shall be authorized only when site conditions provide mechanical, electrical, and environmental protection suitable for the electronic equipment.
- 3. Special Protection of Electronic Equipment and Cable
  - a. This Contractor shall conform with the following minimum standards and procedures for the storage and protection of the equipment during installation:

- b. Class 1 - Cable and distribution apparatus, back boxes, face plates, terminal boxes, and rack frames may be stored and installed in weather-protected spaces under "normal" construction site conditions provided that no electronic components are contained within devices and provided that storage boxes are sturdy, well sealed, and devices are protected with imperforate inner plastic sheeting. When installed, devices must be protected from dirt, dust and moisture by sturdy impermeable plastic sheeting, and completely covered with heavy corrugated cardboard, held in place securely by duct tape. Covers shall not be removed until the area is broom cleaned. Care shall be taken to prevent damage and prolonged exposure to improper site conditions during installation. In no case shall devices remain uncovered overnight during installation or while work is taking place causing high dirt dust or moisture levels in the area of placement.
- c. Class 2 Control panels, spare parts, and test equipment (except as listed under Class 3) shall be protected and treated as per the Class 1 devices with the following additional provisions:

  Equipment shall be stored in an air-conditioned secure space.

  Equipment shall not be shipped until such space exists on site and is approved by the Consultant and Contractor. Control panels with electronic components may be installed providing they are protected as described under Class 1 description above, but electronic components must be removed and shall not be installed until the area of installation is broom cleaned and all dirt, dust and moisture producing work is completed in the area. All other equipment in this class shall not be installed until the area of installation is broom cleaned, "blown" clean with pressurized air, mopped, secure, and air conditioned.
- d. Class 3 Mixing consoles, filled equipment racks, and other electronic equipment shall not be shipped to site until the control rooms are finished, air conditioned, dust free, broom and mop cleaned, secure, and in all respects complete and ready for occupation. This class of equipment shall not be unpacked until the system is complete in all other respects. Under no circumstances may any equipment in this class be removed from the control rooms into or through spaces that are not cleaned, air conditioned, and complete.

#### 3.04 TESTING AND ADJUSTMENT

#### A. General

- Perform tests and adjustments to the Sound, Video & Communication System as outlined in this specification. These tests and adjustments shall be completed at the time(s) specifically indicated in "Part 1 -General: Commissioning."
- 2. Provide a minimum of two qualified technicians to assist in tests, adjustments, and final modifications during the testing and adjustment period.
- B. Preparation

- 1. Ensure that all equipment racks, panels, and back boxes have been adequately cleaned of dirt, dust, and debris. Reassemble all equipment and replace all panels and covers with the necessary screws and/or other appropriate hardware prior to the final site inspection.
- 2. Before applying AC power to Sound, Video & Communication System equipment, perform a complete system inspection on the site to verify that all items are correctly installed and will operate safely as specified in the Contract Documents.
- Verify also that each individual section of the Sound, Video & Communication System has been correctly installed and is fully operational.

## C. Conditions

- 1. Do not use any major control equipment intended for installation in the Sound, Video & Communication System for the purpose of checking or testing wiring or circuitry until such time as requirements for "Class 3" equipment meet the environmental conditions described in "Special Protection of Electronic Equipment and Cable" above. Provide testing apparatus, substitute control equipment, or other devices for testing wiring and circuitry prior to the existence of these conditions at all locations of Sound, Video & Communication System equipment.
- 2. Electroacoustic measurements shall only be made once all interior room finishes are completed and all performance equipment is in place and operational. Such equipment includes, but is not necessarily limited to, audience chamber seating, acoustic isolation doors, acoustic canopies, and acoustic control curtains and banners.

#### D. Test Equipment

- 1. The following test equipment, provided at the expense of the Sound, Video & Communication System Contractor, shall be available on site during all testing and adjustment sessions, initial and final site inspections, and demonstration and instruction sessions. Provide all appropriate monitors, adapters, cables, and connectors necessary to interconnect the test equipment devices to each other and to the Sound, Video & Communication System equipment.
  - a. Multi-Function Audio Signal Generator/Analyzer
    - 1) Neutrik Minirator MR2 / Minilyzer ML1, or approved equal
  - b. Digital Multimeter
    - 1) Fluke 77 IV Series, or approved equal.
  - c. Polarity Testing System
    - 1) LA Audio PC90 or approved equal
  - d. Impedance Meter
    - 1) Goldline ZM-1, or approved equal.
  - e. Sound Level Meter
    - 1) MiniAnylyzer, approved equal
  - f. Two-channel FFT-Based Electroacoustic Analysis System
    - 1) SIA SMAART
    - 2) General: Computer-based electroacoustic measurement system requiring proprietary equipment and a certified operator. Provides dual-channel FFT transfer- function measurements, phase response, delay

locator and real-time analysis and ability to perform these measurements with test signals and with program (music) occurring during performances.

- g. Two-Way Radios
  - 1) Motorola UHF, or approved equal.
  - 2) Quantity: Six (6), with spare battery & charger.
- Requests for alternate test equipment shall be submitted to the Consultant for approval shall meet or exceed the manufacturers' published specifications for the above components. No exceptions. Nonprofessional test equipment, including "custom-built" components, shall not be acceptable.

#### E. Procedure:

- 1. Perform the following tests and adjustments to the Sound, Video & Communication System. All test results and system adjustments shall be fully documented for inclusion in the Initial and Final Test Reports. Refer to "Part 1 General: Commissioning".
- 2. Continuity
  - a. All permanent Sound, Video & Communication System wire and cable shall be tested for continuity after installation in conduit and before termination in panels or racks. Also test for shorting contact between any and all conductors in a multipair or multiconductor cable and between each conductor and the conduit (building safety ground). Use a continuity meter for all tests.
  - b. All Sound, Video & Communication System wirepaths shall be tested to ensure that device inputs and outputs, assigned to particular circuits or channels, terminate to the correct location, and that all corresponding labeling is accurate.
  - c. Measure and verify electrical and electroacoustic polarity of all Sound, Video & Communication System components to ensure that the entire system is properly connected (i.e., the system shall be "in phase"). Ensure that absolute polarity is maintained throughout all signal paths, regardless of patching or other routing changes.
  - d. Document all wiring or termination changes made in order to maintain system polarity.

## 3. Impedance

- a. Measure and document the impedance of each microphone and line level line terminated with a 600-ohm 1% precision resistor, at 250Hz, 1kHz, and 4kHz, while disconnected from any device input. The load impedance value shall be greater than the resistive load.
- b. Measure and document the impedance of each low-impedance loudspeaker line to an unconnected receptacle, at the patch panel, terminated at the opposite end with an 8-ohm 1% precision resistor, at 250Hz, 1kHz, and 4kHz, while disconnected from any device input. The load impedance value shall be greater than the resistive load.
- c. Measure and document the impedance of each low-impedance (nominal 2 to 8-ohm) loudspeaker line while disconnected from

- the power amplifier. The load impedance value shall be greater than the total rated impedance of all connected loudspeaker drivers.
- d. Test each full-range loudspeaker line at 63Hz, 250Hz, 1kHz, 4kHz, 8kHz, and 16kHz.
- e. Test each band-limited loudspeaker line (i.e., bi-, tri-, or quad-amp systems) at the maximum number of test frequencies that fall within the frequency range of the driver under test.
- f. Measure and document the impedance of each 70.7V loudspeaker line at 250Hz, 1kHz, 4kHz, and 8kHz, while disconnected from the power amplifier. The load impedance value shall be greater than the total rated impedance of all connected voice-coil transformers.

### 4. Radio Frequency Interference

a. Use a minimum 60 MHz bandwidth analyzer in conjunction with loudspeaker or infrared receiver/headset monitoring to ensure that the Sound, Video & Communication System under test is free of spurious oscillation and radio frequency interference (RFI). Measure and document all results.

### 5. Gain Structure

- a. Set and document input and output gain controls on all Sound, Video & Communication System components to provide appropriate signal balance (i.e. unity gain) and optimum signal-to-noise ratio for each signal path. Unity gain shall be set by adjusting the gain of each active device (excluding power amplifiers and mixer/amplifiers) for input level equals output level by using a reference signal of 0dBv pink noise at the mixing console output.
- b. Ensure that a minimum of 18dB of headroom exists for each gain stage. The overall system gain (excluding mixer/preamplifiers, mixer/amplifiers, and power amplifiers) through any signal path from any input to any output shall be unity + 1.5dBv.
- c. Conduct listening tests from center of coverage of each high-frequency horn device to determine that there is no audible hiss or distortion.

#### 6. Electronic Signal Path

- a. Measure and document frequency response, signal to noise ratio (S/N), maximum output before clipping, total harmonic distortion (THD), and any spurious noise and/or hum signals of all electronic components in the Sound, Video & Communication System. Measured values must be as published by the manufacturer, or better.
- b. With unity gain levels set, measure and document electrical frequency response for all discrete signal paths from the mixer through each active device, including mixer/amplifier outputs with the loudspeaker lines disconnected. Also test typical signal paths through each combination of mixer input to output. Use a -60dBv (0.8mV RMS) sine wave signal at microphone inputs from 20Hz to 20kHz and a 0dBv (0.775 VRMS) sine wave

- signal from 20Hz to 20kHz at line level inputs. Deviation shall be within +/-1.0dBv from the range of 30Hz to 20kHz, or the specified bandpass for a particular circuit. (Refer to manufacturers' published data).
- c. With unity gain levels set, measure and document signal to noise ratio for all discrete signal paths from the mixer through each active device with mixer input shorted.
- d. Measure and document maximum output before clipping (headroom) and total harmonic distortion of each active device with methods recommended by the equipment manufacturer.
- e. With unity gain levels set, measure and document any spurious noise and hum signals such as 60Hz, 120Hz with harmonics, high frequency oscillation, clicks, pops, or noise spikes for all discrete signal paths from the mixer through each active device, including the mixer/amplifier outputs with loudspeaker lines disconnected. If any unwanted signals are detected, troubleshoot and correct or modify as necessary.

### 7. Power Output

a. Measure and document the output power of each power amplifier and mixer/amplifier, using a sine wave oscillator with less than 0.5% THD as an input source. Terminate each power amplifier channel output with a load resistor to match the nominal loudspeaker impedance. Apply a 1KHz signal at a level to achieve 10 dB below full rated power output of the mixer/amplifier. Observe the sine wave with an oscilloscope to insure that full voltage for rated power can be reached without noticeable deformation of the waveform.

#### 8. Buzzes, Rattles, Distortion

a. Apply a sine wave sweep at a slow rate from 30Hz to 10kHz at 6dB below full rated power output of each amplifier in the Sound, Video & Communication System with output connections made to all loudspeaker drivers or voice-coil transformers. Adjust test frequency range to compensate for band-limited low-voltage loudspeaker lines (i.e., bi-, tri-, or quad-amp circuits) or 70.7 volt loudspeaker lines. Listen carefully to each loudspeaker for electromechanical buzzes, rattles, distortion, or other objectionable noises and correct all causes of such defects. If cause is outside Sound, Video & Communication System equipment and/or the scope of this section of the contract, promptly notify the Owner and Consultant of the cause and suggested corrective procedure.

## F. Sound, Video & Communication System Testing

 The following Sound, Video & Communication System Tests shall be conducted as part of the SMAART measurement and optimization process. Sound, Video & Communication System Testing will require two 8-hour sessions scheduled to ensure quiet ambient noise levels in the test area. The Sound, Video & Communication System Contractor shall provide a certified SMAART technician to operate the SMAART System.

- a. Sound Pressure Level: Measure and document sound pressure level of loudspeaker arrays throughout the seating areas and adjust suspended loudspeaker aiming, as necessary, to achieve a coverage of +/- 3dB, or better, with a peak continuous level of 105dB SPL. Take all readings at seated ear level height.
- b. Loudspeaker Array Driver Alignment: Measure and document the loudspeaker driver alignment of the components of each loudspeaker array. Adjust precision signal delay units as necessary to achieve the best average signal alignment between adjacent components.
- c. Frequency Response: Measure and document the frequency response of each loudspeaker array, as measured in both the reverberant field and near field (with windowed FFT methods), to ensure that the frequency response is within +/-3dB from 100Hz to 3kHz, and rolls off at a rate of 3dB/octave +/-3dB from 3kHz to 12kHz (and beyond, if possible). Apply the pink noise source at a line input of the mixing console. Adjust fixed Sound, Video & Communication System equalization as necessary. If discrepancies arise, the final curve shall be based on the average of the values measured. Hard copy documentation shall be recorded for both time-energy-frequency analysis and ISO one-third octave band frequency response measurement.
- d. Speech Intelligibility: Perform subjective and/or objective speech intelligibility measurements or surveys throughout the facility and make adjustments as necessary to the Sound, Video & Communication System for maximum speech intelligibility. Submit proposed methods of testing to the Consultant for approval.

#### 3.05 PROGRAMMING

- A. At the completion of the Testing process, and in conjunction with the Consultant, Project Architect and Design Team, and other trades, the Sound, Video & Communication System Contractor shall provide full time technical support for ten (10) 12-hour days of Ride Programming. Two (2) technicians shall be provided for the entire duration of the Programming period.
- B. Technical personnel should be prepared to adjust loudspeaker positions, facilitate required changes to Sound, Video & Communication System equipment programming, and troubleshoot any technical problems that may arise during Ride Programming Sessions.

### END OF SECTION